

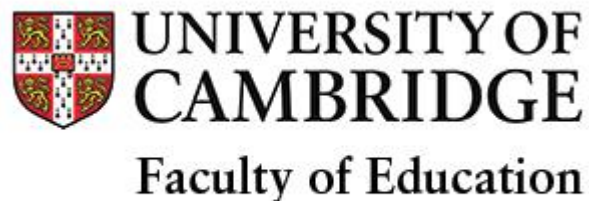
How do ethnic minority students represent geographical knowledge? Exploring the stories that relate to representations and link with post-14 subject choices.

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*This thesis is submitted in fulfilment of the requirements governing the award of Doctor of Education (EdD)*

## Preface

This thesis is the result of my own work and includes nothing which is the outcome of work done in collaboration.

It is not substantially the same as any that I have submitted or is being concurrently submitted for a degree or diploma or other qualification at the University of Cambridge or any other University or similar institution. I further state that no substantial part of my thesis has already been submitted or is being concurrently submitted for any such degree, diploma or other qualification at the University of Cambridge or any other university or similar institution.

It does not exceed the prescribed word limit for the Faculty of Education Degree Committee.

## Acknowledgements

I would like to thank everyone who has supported me throughout my doctoral journey. Firstly, the students; those who piloted my methods, who were involved in both the first and second phases of the research and who engaged as students as researchers. Your stories and your research are central to this thesis and without your goodwill and enthusiasm, it would have been a much harder challenge.

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## Abstract

Students who identify as being from an ethnic minority are under-represented within school geography in England at Key Stage 4 (ages 14 – 16) and Key Stage 5 (ages 16 – 18). At these stages geography is an optional subject and how students view geographical knowledge may influence their GCSE and A level subject choices. This study uses an intersectional theoretical lens to explore representations of geographical knowledge by students of different ethnicities, the stories that relate to these representations and how the students accounted for the GCSE and A level subject choices that they made.

The first part of the study reveals a lack of empirical and contemporary research into ethnic minority students' views of geographical knowledge and subject choices. This is followed by a two-strand exploratory case study at one girls' grammar school in England. The practitioner-researcher strand was two phase; in the first phase, 314 sixth form students (aged 16 – 18) completed a questionnaire to gauge initial views of geographical knowledge. During the second phase, eight of these students represented their views of geographical knowledge through collages, critical incident charts and semi-structured interviews that explored their stories in depth. In parallel, a group of Year 10 (aged 14 – 15) students as researchers used questionnaires to investigate the influence of parents and other factors contributing to students' subject choices at GCSE level.

In the study, geographical knowledge was represented in different ways given different methods. It was found to be diverse and individual, although it was possible for specific themes to be identified. The representations reflected the characteristics and concepts from students' recent formal experiences of geography. Informal experiences also featured but these were not always explicit or straightforwardly definable. Unless students could see the intrinsic usefulness of their view of geographical knowledge then they were unlikely to choose the subject past GCSE level. This study expands theoretical conceptualisations of how students represent geographical knowledge and the factors affecting subject choice, engages students as researchers in a methodologically innovative way and provides a rich and detailed account of post-14 subject choice by ethnic minority students which otherwise does not exist in an English context.



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## List of abbreviations

ALCAB	A Level Content Advisory Board
A level	Advanced level
AS level	Advanced Supplementary level
BTEC	Business and Technology Education Council
CPD	Continuing Professional Development
CRC	Children's Research Centre
CRT	Critical Race Theory
DfE	Department for Education
DofE	Duke of Edinburgh Award
Ebacc	English Baccalaureate
EdD	Doctor of Education
EMAG	Ethnic Minority Achievement Grant
ESRC	Economic and Social Research Council
FSM	Free School Meals
GA	Geographical Association
GCSE	General Certificate of Secondary Education
GER	Geography Education Research
GRT	Gypsy, Roma and Traveller
IRGEE	International Research in Geography and Environmental Education
IGU-CGE	International Geographical Union Commission on Geographical Education
KS3, 4 and 5	Key Stages 3, 4 and 5
L2C	Listening to Children
MFL	Modern Foreign Languages
NPD	National Pupil Database
PGCE	Post-graduate Certificate in Education
PCK	Pedagogical Content Knowledge
PDK	Powerful Disciplinary Knowledge
PhD	Doctor of Philosophy
PLASC	Pupil Level Annual School Census
RGS-IBG	Royal Geographical Society with the Institute of British Geographers
RS	Religious Studies
SaRs	Students as researchers
SIMS	School's Management Information System
SR	Segregation Ratios
SSAT	Schools, Students and Teachers Network
STEM	Science, Technology, Engineering and Mathematics
UNCRC	United Nations Convention on the Rights of the Child

# Chapter 1

## Introduction: the context, rationale and navigation of the thesis

### 1.1 Introduction

Between 1999 and 2015 I taught geography at a girls' grammar school of 1300 students located in the South East of England. I lived a significant portion of my life at the school; it saw and enabled my promotion to Curriculum Manager for Humanities and Head of Geography, the birth of my three children, my decision to work part-time and was latterly the environment where I carried out research.

My interests as a researcher have a dual focus. Pedagogy is central, but of equal importance is my identity as a geographer. Throughout my academic career my interests have been focused on those who might not otherwise have a voice; from my undergraduate dissertation which investigated the place of travellers within the rural idyll to my Masters dissertation which explored students' perceptions of geography.

Given this context and returning to my classroom after maternity leave in 2012, I noticed the proportion of ethnic minority<sup>1</sup> students in my KS3<sup>2</sup> classes appeared significantly higher than before. However, the ethnic minority students in my KS4 and KS5 classes where geography was an option, were conspicuous by their absence. A second thought then began to emerge. In my Masters research, of the six students I interviewed, one had a very different view of geography to the others; she was Indian, the rest were White British.

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<sup>1</sup> Throughout this thesis I use the term ethnic minority to refer to those who are non-White British. The contested nature of this language is discussed fully in Chapter 3.

<sup>2</sup> KS3 is an abbreviation of Key Stage 3 and refers to Years 7, 8 and 9 (age 11 – 14) of secondary school in England. Similarly, KS4 refers to students in Years 10 and 11 (age 14 – 16) and KS5 refers to students in Years 12 and 13 (age 16 – 18).

These observations acted as a stimulus for the empirical research in this thesis which explores how students of different ethnicities represent geographical knowledge and how they account for the subject choices they make post-14. Spatially, I bound my research within England as it is the country in which I work and have most experience. Temporal boundaries are harder to determine but I largely take data from 2000 onwards as this encompasses the period of formal education of the students who were part of my research and the duration of my teaching career. I also focus on the 14 – 18 age group as this is the time when GCSE and A level choices are made and these courses studied. However, I refer to both higher education, primary and early secondary school phases to provide context where appropriate.

## 1.2 The pattern of uptake of post-14 geography courses by ethnic minority students in England

Geography is not compulsory beyond the age of 14 in English schools. This has an impact on absolute and relative uptake of geography at different levels and comparative to other subjects. In higher education, while ethnic minority students are more likely to be admitted to university than White British students in the UK (in 2010 58% of ethnic minority students leaving school went on to attend university compared with 43% of White British students), their participation is not uniform across subjects with only 6%<sup>3</sup> studying humanities subjects (Connor *et al.*, 2004; McCulloch, 2014a). While this situation is improving (Royal Geographical Society, 2012) there is minimal research at secondary level into the uptake of geography by ethnic minority students at GCSE and A level. With the secondary school student population represented by 95 different ethnic minorities and

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<sup>3</sup> This figure of 6% is from the study by Connor *et al.* (2004) which uses data from 2001-2002. More recent data for humanities subjects is unavailable. However, McCulloch (2014b) suggests that, despite the proportion of young people attending university having increased dramatically, inequalities in participation of children from different socio-economic and cultural backgrounds are very durable.

rapidly becoming more diverse, this seems surprising<sup>4</sup> (Vidal Rodeiro, 2009). It is worth noting that uptake is affected by the ability of students to access subjects (Singleton, 2012; Gardner, 2013). For example, Gypsy, Roma and Traveller (GRT) students rarely stay at school post-14 and so are likely to have reduced uptake (Wilkin *et al.*, 2010). Equally, the pressure of school league tables has resulted in some schools moving from academic to vocational qualifications so students, especially those in urban areas who are more likely to be from an ethnic minority, are not given the option of studying GCSE geography and therefore are deprived 'of the opportunity to explore the geographical' (Weeden and Lambert, 2010: 75).

Analysis of National Pupil Database (NPD) data by Weeden (2011a) illustrates that the uptake of geography at GCSE level by ethnic minority groups<sup>5</sup> in England is unequal (Table 1.1)<sup>6</sup>. In geography, two ethnic groups, Indian and Chinese, were over-represented ( $>1.10$ ). Most of the remaining ethnic groups, including Bangladeshi, Pakistani, African, Caribbean, GRT and mixed ethnicity groups were under-represented ( $<0.90$ )<sup>7</sup>. The comparison between subjects is also striking with history and triple science having similar patterns to geography, yet RS is significantly different with most ethnic minority groups being over-represented. While Weeden (2011a) does not offer a general explanation for this, he suggests that over-representation by the Irish group (which is 2 to

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<sup>4</sup> Much of the lack of research is to do with difficulties in accessing data. The ethnicity of students is not declared to exam boards so researchers have to rely on other data sets such as the Pupil Level Annual School Census (PLASC) which vary in their validity and reliability and are time consuming to analyse.

<sup>5</sup> Due to the fact that the White British group is significantly larger than other ethnic groups (75% of the cohort), Weeden (2011a) uses segregation ratios (SR) rather than percentages to minimise distortion of the data. If  $SR = 1$ , the group is perfectly represented; the proportion of a particular group in a single sub-area is the same as the proportion of all group members in the same sub-area. If  $SR < 1$ , the group is under-represented, so 0.8 means that the group has 20% less entries than expected (Gorard, 2001, p.69).

<sup>6</sup> Table 1.1 shows data for selected subjects; geography, history, Religious Studies (RS) and triple science. History and RS are included as they are humanities subjects and usually in direct competition with geography as options at GCSE. Triple science (biology, chemistry, physics) has also been included as the move from double to triple science in many schools potentially reduced option spaces in the timetable for high-attaining students who in many cases already find it difficult to make choices between subjects.

<sup>7</sup> While not directly concerned with attainment, it is interesting to note that Indian and Chinese students also have the highest attainment with 57% and 66.5% of students achieving 5 A\* to C grades at GCSE respectively while Caribbean and GRT students have the lowest levels of attainment with 28% and 5% respectively achieving the same measure in 2007 (Vidal Rodeiro, 2009; Runnymede Trust, 2012).

3 times that expected) could be explained by attendance at catholic schools where RS is compulsory.

*Table 1.1 GCSE entries for different subjects by ethnicity, 2007 (After: Weeden, 2011a)*  
*Green shading = over-represented (>10%); Purple shading = under-represented (>-10%)*

Entries for selected GCSE subjects 2007	Grand total	Percentage of cohort	Geography	History	RS	Triple science
White British	481670	75.2	0.98	0.98	0.92	0.78
Irish	2188	0.3	0.99	1.26	2.49	1.08
any other White background	12769	2.0	0.89	0.94	1.18	0.85
Bangladeshi	5562	0.9	0.84	0.78	1.56	0.56
Chinese	2108	0.3	1.20	0.93	0.99	1.99
Indian	13141	2.1	1.17	0.93	1.28	1.19
Pakistani	14180	2.2	0.78	0.82	1.50	0.54
any other Asian background	4845	0.8	0.97	0.77	1.28	1.21
African	11069	1.7	0.76	0.82	1.61	0.61
Caribbean	8162	1.3	0.58	0.70	1.35	0.42
any other Black background	2585	0.4	0.62	0.73	1.37	0.47
White and Asian	2779	0.4	1.03	1.07	1.34	1.31
White and Black African	1338	0.2	0.77	0.87	1.17	1.00
White and Black Caribbean	5477	0.9	0.65	0.71	1.00	0.45
any other mixed background	4955	0.8	0.85	0.93	1.20	0.92
Gypsy / Romany	345	0.1	0.33	0.36	0.25	0.07
Traveller of Irish heritage	141	0.0	0.22	0.38	0.59	0.09
any other ethnic group	5212	0.8	0.83	0.75	1.22	0.76
none	50908	7.9	1.49	1.48	1.08	3.49
information not obtained	5403	0.8	0.92	0.92	0.80	0.47
refused	5986	0.9	0.94	0.97	0.93	0.91
total entries	640823	100.0	1.00	1.00	1.00	1.00
Percentage of cohort entered for exam			28.5	31.6	24.0	7.9



Inequality is also evident across ethnic groups in the uptake of geography at A level in England. Vidal Rodeiro (2009)<sup>8</sup> suggests that only White British (14.02%) and Irish (11.97%) are well represented. Every other group is significantly under-represented, including those of Chinese and Indian ethnicity (5.11% and 5.44% respectively) which is interesting given they were well represented at GCSE level. Again, it is Caribbean students who have the lowest uptake with just 3.30% choosing the subject, followed closely by Pakistani students at 3.56%<sup>9</sup>.

### 1.3 The context of Claytons Academy<sup>10</sup>

Claytons is a single-sex, girls' grammar school located in the South East of England. The school is selective, taking approximately the top 30% of the ability spectrum and has a wide catchment area with nearly 80 feeder primary schools. In this section, I use data from the School's Management Information System (SIMS) to paint a picture of the changing ethnicity of the school's population and the uptake of geography by ethnic minority students post-14.

In 2005, 16% of students were non-White British and this increased to 25% by 2013. Furthermore, the most dramatic increase, from 19% to 24%, occurred between 2011 and 2012, the year of my maternity leave. Put into a national context this increase is not surprising. Students from non-White backgrounds are more likely to attend grammar

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<sup>8</sup> Vidal Rodeiro (2009) uses % rather than segregation ratios to illustrate uptake. 10.95% of all students who take A levels opt to take A level geography and so a % which is higher than this figure suggests the ethnic group is over-represented, while a figure below this suggests under-representation.

<sup>9</sup> GRT students do not feature in the analysis of A level data as the number of students in this ethnic group who take geography A level is negligible.

<sup>10</sup> Throughout this thesis I use the pseudonym Claytons Academy or simply Claytons to refer to the school in which this research was carried out.

school than their White counterparts, a difference which is particularly marked for those with Asian and Chinese backgrounds (Cribb *et al.*, 2013)<sup>11</sup>.

During the period 2005 to 2013, the proportion of ethnic minority students opting for geography at Claytons also increased but not by the same rate: in 2005, 8% of students from an ethnic minority opted to take GCSE or A level geography, which rose to 14% by 2013. School data from 2012 suggests that most ethnic groups were represented in geography at GCSE level, the only exceptions being Caribbean, White and Black African, Irish and other ethnic groups<sup>12</sup>. Most of the ethnic groups represented<sup>13</sup> were under-represented within the cohort, most significantly those from other Asian backgrounds. Those from a White British or other White background were well represented and reflected the cohort as a whole. There were just two ethnic groups significantly over-represented; Bangladeshi and other Black background. The small size of the sample – there were just 360 students in total who could have potentially opted to take GCSE geography in 2012 of whom 167 actually did – makes generalisation difficult. In addition, with only two students of other Black background in the school, one of whom opted to take GCSE geography in this cohort, the percentage of figures are skewed and were unlikely to be the subsequent in future years.

The uptake of geography at A level shows a different pattern to GCSE as the majority of ethnic groups were not represented at this level in geography classes at Claytons in 2012. There were only six ethnic groups represented which can be divided into two groups – those significantly over-represented (White British, White and Asian and White and Black

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<sup>11</sup> A Sutton Trust analysis of data from the Department of Education suggests that disadvantaged Asian students are three times, disadvantaged Indian students are four times and disadvantaged Chinese students are fifteen times more likely to attend grammar school than their disadvantaged White British peers (Cullinane, 2016).

<sup>12</sup> A methodology similar to that employed by Vidal Rodeiro (2009) was used to determine over and under-representation. The Caribbean, White Black African, Irish and Other ethnic groups were not represented. For the first two groups this was because there were no students in the GCSE cohort. For the second two groups this was because there were small numbers of students (5 and 2 respectively) in the GCSE cohort, but they had not chosen geography.

<sup>13</sup> The ethnic groups which are included here are those which the school uses in its student data sheets. Therefore, some ethnic groups, such as GRT, and those who refused to state their ethnicity are not included here.

African) and those significantly under-represented (Other White background, African and Chinese)<sup>14</sup>.

The reasons for this over-representation of students with a full or partially White ethnic background are likely to be complex and both institutional and individual and it is important to recognise that these differences in uptake may not be attributed fully to ethnicity as other factors, including socio-economic status, gender and types of schooling may also have an impact. Indeed, Singleton (2012), Weeden (2011b) and Weeden and Lambert (2010) suggest that inequalities exist at both a national and local scale and that uptake of geography is typically skewed towards high-attainers, those from selective schools and males, a claim which is, at least with regards to level of achievement, supported by Cline *et al.* (2002). The nature of Claytons – single-sex (girls), with 100% achieving five A\* to C grades and with only 5 students (out of a school of 1293 students) on free school meals - a recognised method of determining socio-economic status – means that the intersection of these factors with ethnicity is an interesting area of investigation.

## 1.4 The research questions

I had two specific areas which were central to the formulation of my research questions; how students of different ethnicities view geography and their decision making about the subject post-14. While each of these could have been individually crafted into a workable thesis I am interested here in exploring both as separate entities but also in seeing how they relate. Understanding how students view subjects is vital given that these perceptions have a significant bearing upon how students respond to, interpret and value their learning experiences (Hopwood, 2012: 6). Furthermore, Carswell (1970), Rawling (2001), Norman and Harrison (2004) and Weeden (2007) suggest that, these perceptions may influence their subject choice, a popular idea that has some empirical support (Adey

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<sup>14</sup> Again, the cohort is even smaller for A level than it is for GCSE – there were 91 students in Years 12 and 13 who opted to take geography in 2012 – and so the same caution applies when interpreting the data.

and Biddulph, 2001). However, Hopwood (2012: 9) is keen to point out that due to the complexity of the options process, student decisions cannot be attributed to their views alone. As a result, I am keen to acknowledge these relationships within my research questions while avoiding the language of cause and effect.

The main question for my empirical research is therefore:

**What does geographical knowledge consist of from ethnic minority perspectives?**

which is subsequently broken down into three sub-questions:

- How do students of different ethnicities represent geographical knowledge?
- How do the students' stories relate to their representations?
- How do the students account for the subject choices that they made at GCSE and A level?

Arriving at these questions was not a straightforward process and one which is described in Section 6.1. However, it is important here to justify these sub-questions and to discuss the language and terminology which are used. This research has arisen from my observations and explores the situation at Claytons. 'How' is therefore an appropriate interrogative pronoun to use at the beginning of each question as it does not suggest causality. In addition, according to Thomas (2009), research questions should be precise, manageable and ethical and the phrasing of these research questions satisfies these criteria; I describe how the questions were made more precise in Section 6.1 while logistical and ethical concerns are explored in Part II.

In terms of definitions, key concepts such as 'geographical knowledge', 'ethnicity' and 'subject choice' are explored in Chapters 2, 3 and 5 respectively while the choice of the word 'representation' as opposed to 'perception' or 'conception' is discussed in the following section. However, there are two terms – 'students' and 'stories' – which require further explanation. 'Children', 'young people' or 'participants'<sup>15</sup> are all terms that could

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<sup>15</sup> The Oxford English Dictionary defines a child as 'a young human being below the age of puberty or below the legal age of majority' as opposed to a young person who, at least in UK law, is 'a person generally from 14 to 17 years of age' (OED, 2017). A participant is 'a person who takes part in something' (OED, 2017). By definition, they may be a child or a young person but equally they may not.

have been used instead of 'students' in the research questions. However, I felt 'children' was too juvenile for research focusing on 16 – 18 year olds and 'participants' was too formal; my relationship with the students was central and this term implied distance. 'Students' was selected over 'young people' as it suggested context. As this was another important element, it seemed appropriate to mirror the language used at Claytons to describe the people involved. The term 'stories' implies that meaning is constructed within a cultural context and allows the understanding of complexity and the development of empathy (Bauman, 1986). It empowers the students by allowing their voices to dominate.

### 1.5 Defining key terminology – perceptions, conceptions or representations?

Defining the terminology central to this thesis and specifically whether it deals with perceptions, conceptions or representations of geographical knowledge is fraught with difficulty. There is a substantial body of philosophical literature on the difference between perception and conception and general agreement that perceptions are formed from our sensual experiences of the world while conceptions are mental representations which are formed by, but in turn shape, our perceptions (Dretske, 2000; Smith, 2002). The result is an intricate, messy and complex relationship between perceiving and conceiving which becomes even more so when that under consideration is as intangible as geographical knowledge (Bueno, 2013).

To compound this problem there is not one clear, unproblematic definition deployed within the wider related literature of students' views of a range of school subjects. Indeed, the terms perception and conception are often used interchangeably or substituted for alternatives such as understanding, orientation or nature (Brown *et al.*, 1999; Rayment, 2000; Abd-El-Khalick and Lederman, 2000; Lunn, 2002; Abd-El-Khalick and Akerson, 2004).

Within the handful of studies which have investigated student experiences within the school subject of geography the situation is similar; the terms are not clearly defined (Lam and Lai, 2003: 200). This is particularly problematic given that in many studies the same terminology is used to mean different things (Chalmers *et al.*, 2002). Dowgill (1998) and Hopwood (2012) research conceptions while Adey and Biddulph (2001), Norman and Harrison (2004), Bar-Gal and Sofer (2010) and Kitchen (2011; 2013a; 2013b) investigate perceptions. However, it is unclear within all of these studies what the fundamental difference between perceptions and conceptions actually is. Hopwood (2012: 46) is relaxed about this, stating that the distinction matters less than the arguments surrounding the nature of these conceptions. While, to an extent I agree, I think what is most important is that whatever terminology I adopt I do so in a consistent manner; something which has not been evident in previous studies.

To further complicate the issue, Taylor (2009; 2011) in her work on 14 year olds' views of Japan uses the term 'representations'. She explains that using a term such as 'perception' (and I would argue that the same holds for 'conception') suggests that the researcher can access the world inside the students' heads. Representations are more tangible. They refer to the externalisation of perceptions and conceptions and the process of their creation adds another dimension to the data (Disney, 2005).

Due to the confusion surrounding the terms 'perception' and 'conception' in the geography education literature, the challenge of getting inside the students' heads and the tangible nature of my methods I have chosen to use the term 'representation' within this thesis. However, it is worth also noting that the referenced literature and theories which provide the framework for my thinking do employ different terminology. For example, I have termed the theory underpinning the representation of geographical knowledge, 'perception categorisation theory' (see Chapters 2, 7 and 10). This term is a product of the terminology employed by the authors, Walford (1996) and Catling (2004), yet while the focus of the theory is on perceptions, I do not see it as being at odds with my research on representations. Indeed, an awareness of the differences between the

language of the theory and this research arguably allows for a more nuanced and robust critique.

## 1.6 The importance of this research

While other disciplines, particularly science, have gathered a wealth of data and built up rich pictures of how students view school subjects, there is a dearth of comparable research in geography. Hopwood (2004; 2007; 2009; 2012) and Kitchen (2011; 2013a; 2013b) have started to address this gap by providing deep and detailed accounts from small numbers of students. However, as Butt (2012) points out, the students in Hopwood's study were all White and while one of the six students in Kitchen (2011) was of Indian ethnicity this was not addressed within the confines of the study. Hopwood (2012) argues this is not particularly problematic as while geography may mean different things to students of different ethnicities, perspectives on geography are unique, complex and shaped by a variety of formal and informal experiences; ethnicity and culture are but one aspect. Although I wholeheartedly agree with his second assertion, I cannot agree with the first. It *is* problematic if the views of particular groups of students are not researched, especially if these are the groups who are also under-represented in geography at GCSE and A level. This study is therefore original as it considers ethnic minority students' views of geographical knowledge through deep, rich and highly individualistic accounts.

I suggest that there are three core reasons for the importance of this study which are partly utilitarian, partly educational and partly ideological. Firstly, most of the studies concerning the uptake of geography at GCSE and A level (detailed in Chapter 5) and the work of Hopwood and Kitchen were set against the backdrop of declining examination

entries<sup>16</sup>. In this context it is vital to gain an understanding of the stories that lie behind students' subject choices. Although the overall trend has in recent years reversed, the continued under-representation of ethnic minorities in geography at GCSE and A level at both a school and national scale makes this research important.

Secondly, while several studies including Adey and Biddulph (2001), Biddulph and Adey (2003) and Norman and Harrison (2004) suggest that students enjoy geography when it is relevant to them, how can we really understand what this means, what motivates and is meaningful to them, unless we ask? This research does this. By doing so it provides an insight into how students view geographical knowledge and the stories they tell about their choices. Not only does its *ex post* perspective lend an additional dimension to a poorly understood field dominated by *ex ante* studies but its findings are likely to resonate across other disciplinary backgrounds and contexts in the UK and internationally.

Finally, I write these words six months after the UK voted to leave the European Union and a week after Donald Trump was inaugurated as the 45<sup>th</sup> President of the United States. The pervading rhetoric in both these countries at this time is one of nationalism, populism and division which has prompted the World Economic Forum to suggest that a crisis in western democracy may be one of the greatest global challenges of 2017 (World Economic Forum, 2017). In response and with the aim of defending human rights, the organisers of 'the Women's March' explained their support for 'the advocacy and resistance movements that reflect our multiple and intersecting identities' (Zevallos, 2017). It is in this febrile environment that the voices of young people, women and ethnic minorities need to be heard.

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<sup>16</sup> The 1988 Education Reform Act originally stated that geography, as a foundation subject, would be compulsory to the age of 16. While this was short-lived it resulted in a peak of over 302,298 GCSE and 46,399 A level entries in 1996 and 1994 respectively (Mansell and Robertson, 2001; Gardner, 2013). Since then, entries have declined significantly; the low point was reached in 2011 when 180,737 students were entered for GCSE geography and 31,226 were entered for A level. There is some evidence that in recent this trend is reversing. The most recent figures for 2016 show that 244,033 students were entered for GCSE geography and 36,363 for A level (Geographical Association, 2016).



## 1.7 Navigating the thesis

This thesis has a tripartite structure, bookended by this introduction (Chapter 1) and a conclusion (Chapter 13). Part I provides an exploration of the literature so that the reader may make sense of the thesis. Here, the three central concepts of geographical knowledge, ethnicity and subject choice are explored in Chapters 2, 3 and 5 respectively. Chapter 4 provides an opportunity for deep critical reflection on two papers which lie at the intersection of themes picked up in Chapter 2 and 3 – the nature of subjects and ethnic minority students' views.

Following this exploration of the literature, Part II outlines the research approach. Chapter 6 links my epistemology to my theoretical perspective, methodology and methods before turning to outline ethical dilemmas and issues of power. As a two-phase, two-strand piece of research the structure is complex and Chapters 7, 8 and 9 explain how these different parts fit together. My practitioner research is detailed in the first two of these chapters; Chapter 7 describes the first phase of research and Chapter 8 describes the second phase. The students as researchers strand which runs parallel to my own is explained and justified in Chapter 9.

The final part, Part III, contains my findings and discussion. I present these as three chapters which mirror my research sub-questions. Chapter 10 therefore explores how students of different ethnicities represent geographical knowledge. While inevitably some of their stories around these representations begin to surface in this chapter, the following chapter (Chapter 11) delves into these in more depth. The final chapter in this part, Chapter 12, considers how students account for the option choices they make at GCSE and A level both generally and specifically related to geography.

While the thesis has this introduction at the beginning to set it in context and the conclusion at the end to consider the main findings and implications of this work, each part is also introduced and concluded. This device was employed to lend coherence to the parts but also to be explicit about the decisions made. Each introduction contains a

diagram similar to Figure 1.1 which I have termed 'the golden thread'. Su *et al.* (2010: 86) explain that interpretive enquiry is a search for understanding which involves the construction of ideas in a robust framework and the signposting of key concepts. The golden, conceptual thread binds the study together providing clarity and integrity. This diagram identifies the framework and concepts central to this research and is included in the introduction to each part to highlight those aspects covered within it.



Figure 1.1 The golden thread

## 1.8 Conclusion

Five years is a long time, both in life and in research, and my situation, context, emotions and identity have changed dramatically during my research journey. Stories are central to this thesis and while the focus is on those told by the students, my own story needs telling both to encourage reflexivity and for the reader to understand who was listening to the voices of the students in the first instance. In the same way that I asked students to create a chart of critical incidents that affected their view of geographical knowledge (see Chapter 8) so I have created my own critical incident chart to illustrate my own professional doctoral research journey (Figure 1.2).

While there are many points on this chart which have had a significant influence on my thinking, the most dramatic and arguably most important in the context of this thesis is the change in my professional identity; I no longer am a geography teacher and I no longer work at Claytons. The decision to leave was due in part to my confused identity as a practitioner-researcher and has had a massive bearing given that the stimulus for this research was so personal and situated. I feel regret that I will not directly see the impacts of this research in the classroom in which it was conceived. However, geography education remains at the heart of what I do and as Secondary Curriculum Leader for the Geographical Association, an organisation discussed at length in the pages that follow, this research has the potential to reach a wider audience. As I discuss in Kitchen (2016) and in Chapter 13, as a result of my changing identity the ripples of impact will reach further than I could have imagined at the start of this journey.

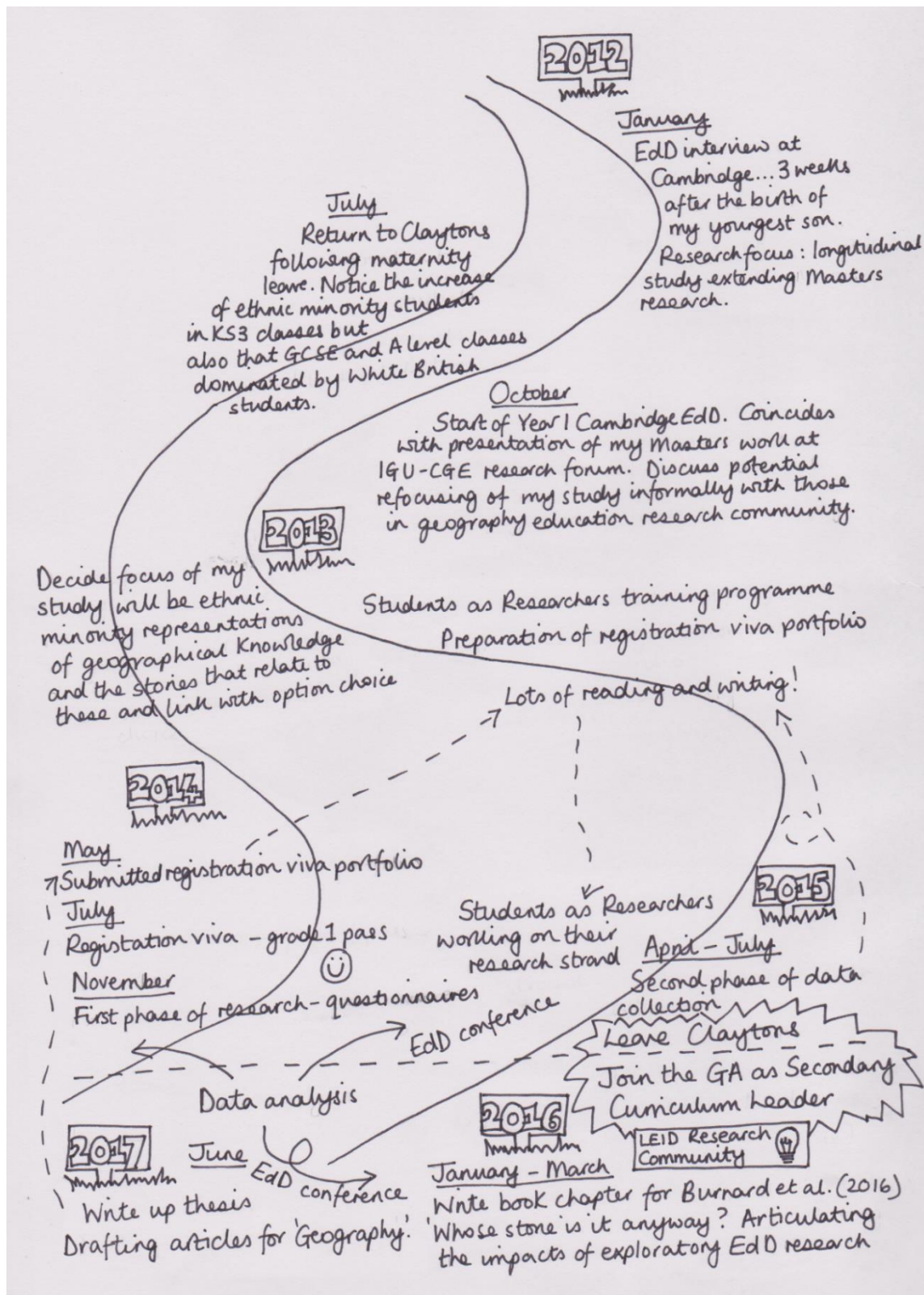


Figure 1.2 A critical incident chart of my research journey

PART I

AN EXPLORATION OF THE LITERATURE

## Introduction to Part I

In an article reflecting on the doctoral journey, Taylor (2007) suggests that a fundamental difference between a professional doctorate, such as the EdD, and the more traditional PhD, is that the latter is for 'professional researchers', while the former is for 'researching professionals'. Similarly, Bournier *et al.* argue that another difference is the starting point of the research. PhD candidates start 'from what is known (that is the literature review), professional doctoral candidates start from what is not known (that is some perceived problem in professional practice)' (2001: 72). Whether an actual starting point in the research process can be identified is a moot point and one I return to in the conclusion to Part I. However, if we take these distinctions between the two doctoral routes as given, they do raise a question regarding the nature and purpose of a literature review within a professional doctoral thesis. Therefore, in putting together the chapters in this part, I have chosen to heed the advice of Wagner who suggests that the literature review be considered as an introduction to a lesson which 'orients other scholars to what the author thinks they ought to know and why this might be important' (2010: 37). As a teacher, conceptualising the thesis as a lesson and a review of the literature as an introduction to this makes sense. However, it implies firstly, that the audience is well defined and secondly, that the literature is attuned to the lesson – the rest of the thesis – itself. I therefore take the opportunity here to make these two aspects explicit.

As a practitioner-researcher with a particular interest in geography education it is unsurprising that I want my research to speak to others within the community. It is a realm in which I feel comfortable and which has supported and afforded me opportunities as a researcher. I am also satisfied that my research sits within the interests of this community and can contribute new knowledge in this field. However, I am also acutely aware that defining this group as the audience orientates this exploration of the literature in a particular direction. It has the potential to exclude others from outside the community who may nevertheless be interested in its themes, methodology or the way in which I have mobilised theory. I have consequently sought to guide the reader, and particularly those who may not be familiar with the texts, through signposting and careful explanation.

Secondly, this part is purposefully termed ‘an exploration of the literature’ rather than the more traditional ‘literature review’ as this orientates the chapters as an introduction to the lesson as opposed to being an holistic summary of what is known. While I do refer to the international context and Bar-Gal and Sofer (2010) is a central reference, the literature discussed is largely Anglocentric. Partly, this is due to accessibility and issues around language. It is difficult to know whether researchers in other countries are interested in issues of ethnicity and geographical knowledge but not sharing their findings with a global audience or whether this is an area which is not being researched at all. Being a member of the International Geographical Union Commission on Geographical Education UK committee since 2014 has allowed me to have greater insight into dominant global research themes<sup>17</sup> and I suspect the situation is the latter (IGU-CGE, 2016). Therefore, while I have attempted to be both systematic and thorough, nevertheless I cannot categorically claim that I have fully covered the existing global literature in English.

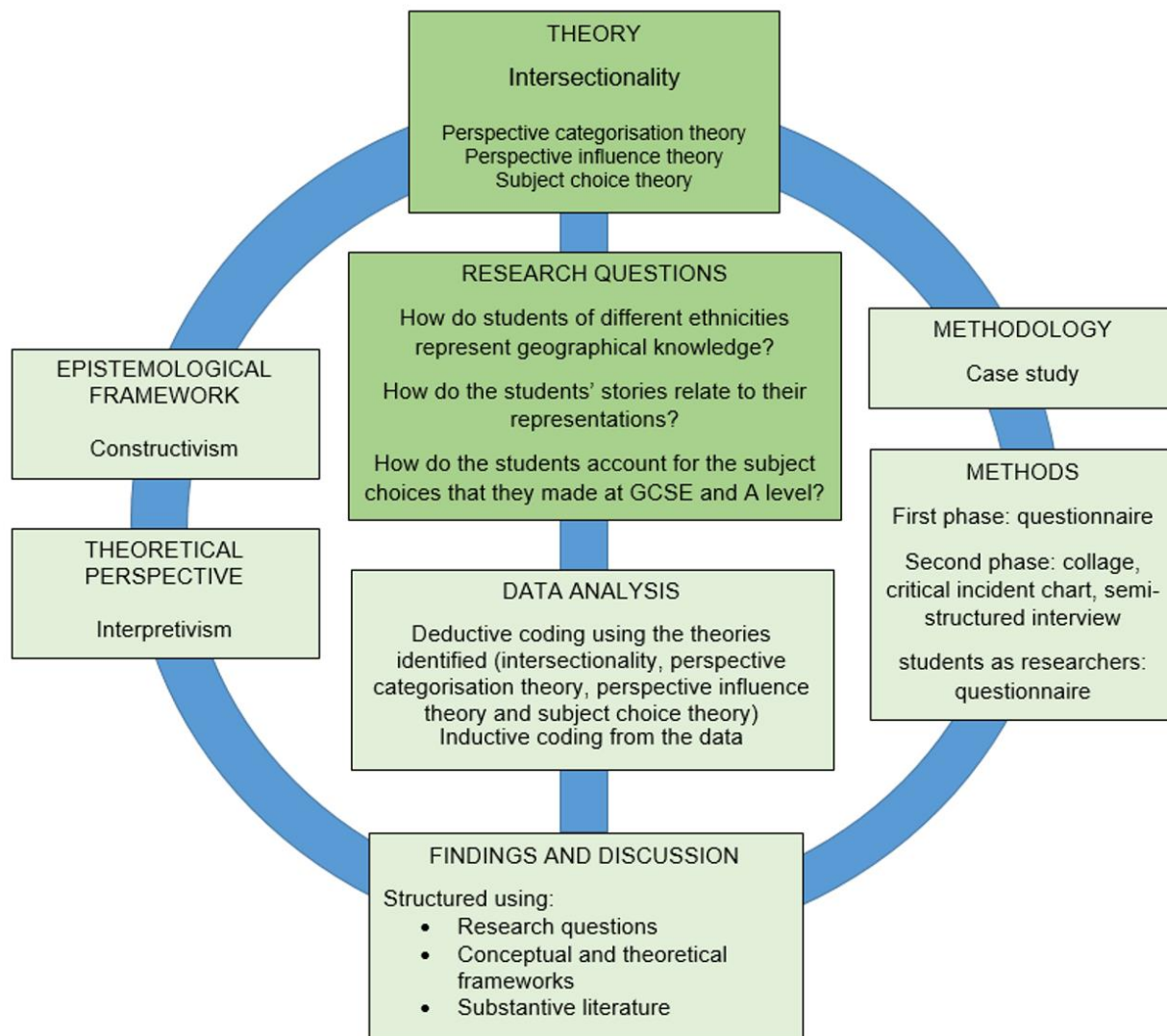
This is also a piece of small-scale research that has a distinct and clearly defined context within one English secondary school. My starting point is very specific and rooted in my own professional practice; it is also, as Bourner *et al.* (2001) highlight, starting from that which is unknown. Therefore, this exploration of the literature begins at the apex of the triangle of knowledge, its shape being determined by the direction of my research and the audience, rather than at the base focusing in upon new knowledge to be discovered.

What literature then do I consider important as an introduction to my thesis? There clearly needs to be coverage of the central concepts of geographical knowledge, ethnicity and subject choice. However, the theories and the research questions with which I have engaged are the main drivers (Figure i.1). Consequently, four chapters comprise this part. The first three focus on the themes of geographical knowledge and ethnicity and provide a foundation for my first two research questions while the fourth focuses on student subject choice and supports my third research question.

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<sup>17</sup> Geography Education Research (GER) generally is strongly focused in Western nations and on Western education systems. It is otherwise poorly developed although there has been an increase in studies from Singapore and Hong Kong over the last decade (Catling and Taylor, 2014).





*Figure i.1 The golden thread – Part I: An exploration of the literature*

Chapter 2 begins with a discussion of the debates surrounding the nature of geographical knowledge within a school context. This considers epistemology and the sociology of knowledge and education more broadly before focusing on the construction of geography as a school subject. Here a range of types of knowledge are explored as is the construction and operation of this knowledge at different curriculum layers. The chapter concludes by explaining why I have chosen to focus on representations of geographical knowledge within this thesis.



Chapter 3 shifts from knowledge to a discussion of the debates surrounding the definition of ethnicity and its context within school geography in England. Key terminology is defined and I then explore a number of theoretical lenses before settling on intersectionality as one which arches over and weaves throughout this thesis. Two main areas of research are then identified; educational research focusing on ethnicity and research by geographers on the same topic.

Chapter 4 focuses more deeply on the literature that covers these two themes - school subject knowledge and ethnicity – by critically examining two papers in depth. The first is by Bar-Gal and Sofer (2010) and considers Israeli students' perception of geography instruction goals while the second, Hawkey and Prior (2011), gives an overview of memory cultures and meaning in school history and, while from a different discipline, overlaps more with the notion of this research.

Finally, Chapter 5 moves away from these literatures which are focused on my first two research questions and, instead, provides a platform for the third. Here, I address two strands of the literature. Firstly, the factors that contribute to students' choice of a range of subjects and geography at GCSE and A level are discussed. Secondly, and importantly given my intersectional perspective explored in Chapter 3, I consider subject choice along different lines of identity specifically gender, ethnicity and socio-economic background.

## Chapter 2

### A discussion of the debates surrounding the nature of geographical knowledge within a school context

#### 2.1 Introduction

The essence of knowledge is central to this research yet what it means ‘to know’ is dependent upon one’s epistemology. As Agnew and Livingstone state, ‘there is no view from nowhere. Knowledge is always local, situated and embedded’ (2011: 4). There needs to be clarity regarding my epistemology to assess this research’s potential for generating new knowledge and to provide a framework for interpretation (Taber, 2013). This chapter consequently provides a discussion of the debates surrounding the nature of geographical knowledge within a school context. Firstly, in Section 2.2, I consider epistemology in its three dominant forms and, after discussing the social nature of knowledge in Section 2.3, trace the construction of geography as a secondary school subject in the recent past (see Section 2.4). Having grounded my perspective within an inherently social constructivist epistemology I then, in Sections 2.5 and 2.6, acknowledge the difference between school (specialist) knowledge and non-school (everyday) knowledge and examine their role in the creation of ‘powerful knowledge’; specialised knowledge which is profoundly different from everyday knowledge and not assimilated via a one-way process (Young, 2013a). The subsequent sections focus on aspects of knowledge driven by my identity as a practitioner. Pedagogical content knowledge is defined before I assess different constructions of geographical knowledge – the institutional, programmatic and classroom - using Young and Muller’s (2010) ‘futures’ model, the work of Deng (2009) and my own theorising as a basis (see Sections 2.7, 2.8, 2.9 and 2.10). Finally, I consider in Section 2.11, why this research focuses on representations of knowledge rather than other aspects of school geography such as skills or values.

## 2.2 Epistemology

Epistemology is ‘a way of understanding and explaining how we know what we know’ (Crotty, 1998: 3). As Maynard (1994: 10) suggests, it is concerned with providing a philosophical grounding for deciding what kinds of knowledge are possible and how we can ensure they are both adequate and legitimate. Definition and transparency are essential given the focus of this research on knowledge, the fact that often terms are used interchangeably, inaccurately and uncritically and the possibility that the students in this research may come to it with a variety of epistemologies.

Generally three epistemologies dominate – objectivism, constructivism and subjectivism – which are inherent in the theoretical perspectives and thus methodologies which one suggests<sup>18</sup>. However, Crotty (1998) is clear to highlight that these are not definitive or unproblematic, while Mills (1998) presents arguments supporting and criticising alternative feminist and Marxist epistemologies.

Objectivism is most clearly linked to a positivist theoretical perspective; that which is known through scientific observation and method (Crotty, 1998: 20). It regards knowledge as certain and fixed, as independent of the context in which it develops and verified through measurement and observation (Crotty, 1998: 8; Firth, 2013: 64). This was the dominant epistemology in the late nineteenth century as the academic discipline of geography emerged and geographers aligned themselves with the natural sciences to make a stronger, more credible intellectual case for being recognised in schools and universities (Castree *et al.*, 2005). It was also dominant in the quantitative revolution of the 1960s during which a group of academics working in the US and UK and led, in the latter by Peter Haggett and Richard Chorley, diffused the notion of geography as an explanatory, spatial science in response to criticisms of the pre-war discipline being ‘amateurish’ and ‘antiquated’ (Haggett, 1995; Castree *et al.*, 2005). Geographers during this period considered themselves broadly as objective seekers of geographical truths

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<sup>18</sup> The way in which my epistemology has influenced my methodology is more fully discussed in Part II and specifically in Chapters 6 and 8.

with phenomena, such as rivers, considered without preconception and the altering of their properties (Castree *et al.*, 2005).

Constructivism<sup>19</sup>, which is most closely aligned with the theoretical perspective of interpretivism, rejects this by stating that meaning is constructed as we engage with the world; that different people construct meaning in different ways in relation to the same phenomena (Crotty, 1998). Critiquing the example above is it really possible to objectively view a river without preconception, without an idea of 'riveness'? Is it also possible to observe, and by definition, interact with the river without changing it in some way? Would all who observe the river ascribe the same meaning to it? Surely, this contradicts the very essence of geography where interrelationships between the human and physical environment and the dynamism of phenomena over space and time are paramount. Human geographers, led by David Harvey in the early 1970s, began to challenge objectivism as the dominant epistemology arguing that it was an inappropriate framework for studying sentient human beings who demonstrated complex motivations and relationships between themselves and the environment. Thus, constructivism became dominant within human geography at least, as while some physical geographers did challenge objectivism, they did not criticise it as deeply as their colleagues (Castree *et al.*, 2005).

While there are links between subjectivism and constructivism, and, as Crotty notes, confusion, subjectivism suggests that, rather than meaning emerging from the engagement between subject and object; it is imposed upon the object by the subject (Crotty, 1998). Subjectivists do not see rivers as having intrinsic 'riveness' and the river makes no contribution to the generation of meaning, rather meaning is given to the river by the subject and is a product of experience and perception. Dominant in the theoretical perspectives of post-structuralism and post-modernism, it characterised the thinking of some, particularly human geographers during the 'cultural turn' and continued the

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<sup>19</sup> Crotty (1998) is clear to distinguish between constructionism – where the social dimension of meaning is to the fore – and constructivism – which is an individualistic understanding of constructionism. While there are times, particularly in Part III, where the role of wider society and culture in shaping the students' view is discussed, it is the students' unique experiences and how they individually make sense of the world which is dominant. Therefore, constructivism is the term which I use throughout this thesis.

fragmentation of the subject which had begun a decade earlier (Cloke *et al.*, 2005; Rawding, 2013). Characterised by notions of representation and discourse of, among others, feminist, green and queer geographies this has served to extend, complicate and enrich the geographical imagination (Morgan, 2002: 23).

These epistemologies are intertwined with identity. As Moore (2007: 3) states, 'what we *know* affects *who* we are (or are perceived to be)'. However, what knowledge becomes normalised and valued within society and what becomes marginalised depends upon who is proposing this knowledge and where they are located, both spatially and temporally (Agnew and Livingstone, 2011). Consequently, what is taught as part of a curriculum is never neutral and these ideas are explored in the following section.

## 2.3 The sociology of knowledge and education

Absolutist and essentialist arguments oppose the definition of the curriculum as 'social' - the former positivist stance wanting to get society out of knowledge and the latter progressive stance wanting to get society out of the learner. However, the curriculum *is* inherently social, partly because the processes of learning transform the learner in a way which is desirable in society and partly because periods of curriculum change are associated with periods of social change (Moore, 2007).

The geography curriculum has evolved and been shaped by society, moving in a downwards trajectory from low status groups at school level to high status university scholars who continually define new knowledge and redefine the discipline (Layton, 1972; Goodson, 1981; 1993). However, within this macro-societal shaping there has also been movement (and fragmentation) at a micro level so that UK geography graduates, and by extension teachers, have little in common because their university courses are so diverse and specialised (Bale and McPartland, 1986).

My undergraduate training, which included a diet of post-modern human geography, and my subsequent incarnation as a geography educator and education researcher, has shaped my constructivist epistemology and belief that knowledge is socially constructed. In turn, this has influenced my view of the curriculum. My students are taught within a fluid structure of education policy; a complex relationship simplified in Figure 2.1. Influenced by Deng (2009) the diagram shows the creation of the curriculum at three distinct levels which operate to different degrees at different Key Stages; the institutional (what the curriculum should be with respect to society and culture), the programmatic (transforms the institutional into school subjects) and the classroom (turning the programmatic into teaching events). Clearly the actors identified at each level are able to influence others – the Geographical Association sits at the programmatic level but has an influence on policy (institutional) and supports teachers (classroom) – and the examples suggested in Figure 2.1 are certainly not exhaustive. The diagram does however illustrate the elements which converge and influence the teaching of geography in the classroom and which potentially influence students' representations of geographical knowledge. Given this, the following sections outline how geography, as a subject taught in secondary schools in the UK, has been and continues to be translated.

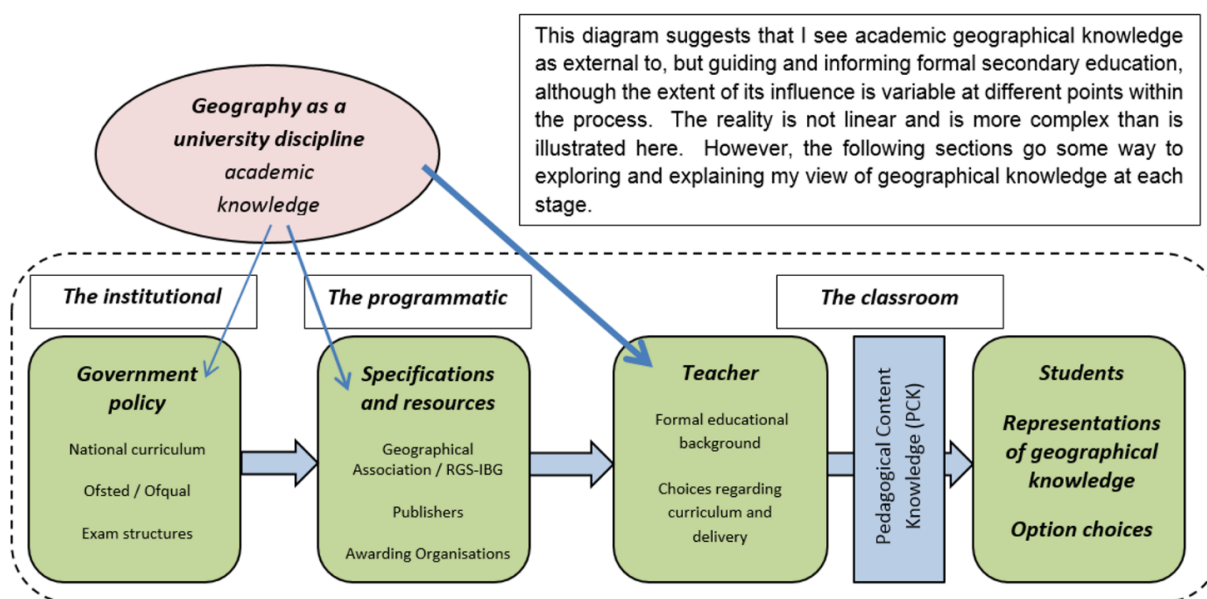


Figure 2.1 Translating geography: from policy to the classroom

## 2.4 The construction of geography as a school subject

School geography emerged, albeit in a piecemeal fashion and predominantly in a handful of elite establishments, before the embodiment of the discipline in university. Indeed, as school geography became more prolific at the beginning of the 20<sup>th</sup> century, there was a need to establish university geography if only to ensure a consistent supply of teachers (Walford, 2001; Castree *et al.*, 2005; Morgan and Lambert, 2011). Ties were strong between school and university geography with academics writing influential textbooks, exam courses and holding central roles in the Geographical Association, and epistemologically, school geography mirrored the paradigmatic shifts evident in academia and outlined in Section 2.2 (Sidaway and Johnston, 2007). However, with the Education Reform Act of 1988 and the introduction of the National Curriculum, academic and school geography parted company, with the gap continuing to grow (Walford, 2001; Rawling, 2001)<sup>20</sup>.

The consequences of this are far reaching. School geography came to an epistemological standstill while university geography modernised, diversified and witnessed seismic epistemological shifts which have questioned the very possibility of knowledge and truth. Thus, it is unsurprising that university geographers bemoaned school geography's lack of contemporary relevance labelling it traditional and out-dated<sup>21</sup> (Rawling, 2001; Winter, 2007; Chapman, 2007).

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<sup>20</sup> The reasons are complex, and are, at least in part, due to the increased dominance of politicians as curriculum shapers and the creation of Ofsted (Castree *et al.*, 2007). Yet Rawding (2010) suggests that the situation was not helped by the introduction of the Research Assessment Exercise in 1986 which diverted academics' attention from school curricula and onto peer-reviewed journals at about the same time as schools were interpreting this new National Curriculum in a narrow and limited way and using associated textbooks such as *Key Geography* (Vaugh and Bushell, 1991) which fixed the content for a generation of school children (Butt, 2008). Bonnett (2003) further suggests that academic geographers have had little involvement with 'popular' (self-designated and pre-tertiary) geography – unlike their history and natural science colleagues – because the latter 'get geography wrong' and therefore are 'an embarrassment to the serious pursuit of the contemporary discipline' (2003: 56). Interestingly, in the context of this study, Bonnett (2003) explains how 'popular' geography is seen as a throwback to the discipline's imperial and racist past which academic geographers have attempted to extricate themselves from.

<sup>21</sup> The criticism is not merely one way. Indeed, Stannard, a teacher writing in *Geography*, displays discontent with the conventional disciplinary hierarchy suggesting that schools have to wait for 'scraps of inspiration from the high table of contemporary academia' (2002: 81).

The tide however appears to be turning. The content of the new A level specifications (first teaching September 2016) has been driven by the A Level Content Advisory Board (ALCAB) which for geography comprised of nine primarily Russell Group university academics, one teacher and a representative each from the Geographical Association and the Royal Geographical Society (ALCAB, 2014). These curriculum changes have been met with a mixed response from both schools and universities. The universities are supportive of a school curriculum that better prepares students for undergraduate study but caution that driving A level reform is not their greatest priority (BBC News, 2012). Similarly, some school teachers, particularly those who have recently attended university themselves, are pleased to see core topics such as 'Changing Place; Changing Places' on the A level curriculum, but others feel out of their depth with the new and unfamiliar content. In addition, while the A level content is shaped by the university sector from above, the gap between GCSE – whose criteria has been driven by the Department for Education - and A level is arguably growing.

## 2.5 Specialist (formal) and everyday (informal) knowledge

Students' views of geographical knowledge are not formed exclusively in the classroom (Kitchen, 2011). Therefore, attention must be given to the distinction between specialist and everyday knowledge (Figure 2.2). Durkheim and Vygotsky both make the distinction between knowledge learnt in formal schooling and knowledge learnt in a non-school setting. While their terminology differs, they agree that the former is not tied to specific objects or events. Consequently, connections can be made between elements of knowledge, even though on the basis of everyday experience they may not appear related (Vygotsky 1987; Durkheim, 1983; 1995). Additionally, if knowledge is not tied to the everyday world this allows the ability to project beyond the present<sup>22</sup> (Young, 2008a). These features distinguish the theoretical from the everyday and have been used as a justification by geographers for retaining the subject in the National Curriculum. Lambert

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<sup>22</sup> Within geography, this projection beyond the present manifests itself in the imagining of geographical futures.



(2013a) specifically argues that young people should have access to specialist geographical knowledge and to encounter the world as an object of disciplined thought, particularly as many contemporary debates are spatial, environmental or global. Indeed, he uses the concept of GeoCapabilities to argue that an individual will have greater potential to lead a life that he or she values if they acquire geographical knowledge and can therefore think geographically<sup>23</sup>. However, some have questioned the wisdom of making distinctions between specialist and everyday knowledge arguing that these only make sense within certain subjects or aspects of subjects<sup>24</sup>. For example, Winter (2007) believes that acknowledging everyday knowledge encourages reductionism which contradicts the notion of geography as a scientific discipline<sup>25</sup>.

The relationship between specialist and everyday knowledge is complex and contested. Vygotsky (1962: 85) explains that ‘they influence each other and are part of a single process’, while Young (2013b: 111) emphasises their distinctiveness, focusing on a definition of the curriculum which refers to the knowledge that pupils are entitled to know but which ‘does not include students’ experiences’. At a fundamental level Vygotsky (1962) also suggests that they develop in opposite directions; scientific concepts begin at a basic level and with work at school and reading, become more complex. Whereas children already have a rich experience within the everyday but, because they have little to hang these on, their ideas are merely descriptive and tend towards misconception (Young, 2008a; Roberts, 2013). Young builds on this to critique his previous constructivist stance saying that it does students ‘no service to construct a curriculum around their experience...on the grounds that everyone’s experience is equally valid...if schools do

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<sup>23</sup> GeoCapabilities is a three year EU funded Comenius project running from 2013 to 2016 and involving 10 partners and 20 associate partners from a number of countries and from both a university and school based background. Underpinned by the concept of ‘Powerful Disciplinary Knowledge’ (PDK) it advocates a ‘Future 3’ curriculum (see Section 2.7 for definition and further discussion) so that young people can move beyond everyday knowledge in order to understand our highly globalised and complex world (GeoCapabilities, 2016).

<sup>24</sup> Within geography these distinctions vary according to whether physical or human concepts are being considered. Physical concepts are rooted in Earth science and based on factual and specialist knowledge whereas human concepts are more aligned with social science and therefore take experiential and everyday knowledge more into account.

<sup>25</sup> Bonnett (2003) uses the technical vocabulary of the discipline to illustrate this point. He suggests that using such vocabulary makes it difficult for academic geographers to locate themselves within wider public debate. Yet, he also explains that if this technical vocabulary is not used then everyone is a geographer; it equalises academic and ‘popular’ geographical knowledge.

no more than validate the experience of pupils, they can only leave them there' (2008a: 15). While Roberts (2013) agrees that a curriculum should go beyond the everyday, she also believes that student experiences need to be an explicit object of study and actively built into the curriculum otherwise they will be treated superficially or neglected; they are the starting point but not the end point. She cites projects such as Young People's Geographies<sup>26</sup> which have connected with student experiences and provided rich and positive anecdotal evidence from ethnic minority students whose voices are otherwise not heard or valued (Biddulph, 2011). Catling and Martin (2011) go further and contest Young's notion of powerful knowledge by suggesting that the geographical knowledge which very young children acquire from their everyday experiences, their ethno-geographical knowledge, is powerful in its own right. They cite research which suggests that everyday knowledge can be rational and coherent and therefore should be recognised and valued in dialogue with powerful knowledge rather than subservient to it. Roberts (2017) explores the role of geography education in developing the relationship between these two types of knowledge, suggesting that the power is derived from enabling students to make connections between their everyday knowledge and the geography they are taught in school. She argues that students can be helped to understand new concepts if they can relate them to their direct experience and this can also enable teachers to correct misconceptions. Such an approach values the students' contribution to their thinking about concepts and respects what they already know.

Drawing on the work of Martin (2005; 2006; 2008) which explores academic and ethnogeographic influences and Kitchen's (2011) investigation into the role of the teacher; perspective influence theory is an attempt to describe the many and varied specialist (formal) and everyday (informal) influences on students' views of geographical knowledge. Illustrated in Figure 2.2 it describes a complex range of actors and influences although stops short of either explaining their role or suggesting the extent to which they have an effect. Throughout this thesis it is mobilised as a theoretical framework which is

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<sup>26</sup> Young People's Geographies is a project run by the Geographical Association which involves students in the curriculum making process by encouraging them to focus on their own 'lived' geographies in an effort to make the curriculum more relevant and exciting. Funded by the Action Plan for Geography the project ran for 5 years from 2006 until 2011. For further information see [www.youngpeoplesgeographies.co.uk/](http://www.youngpeoplesgeographies.co.uk/)

used to structure the analysis of data – particularly that from the critical incident chart and interview (see Chapter 8) - and the discussion of findings relating to the second research sub-question (see Chapter 11).

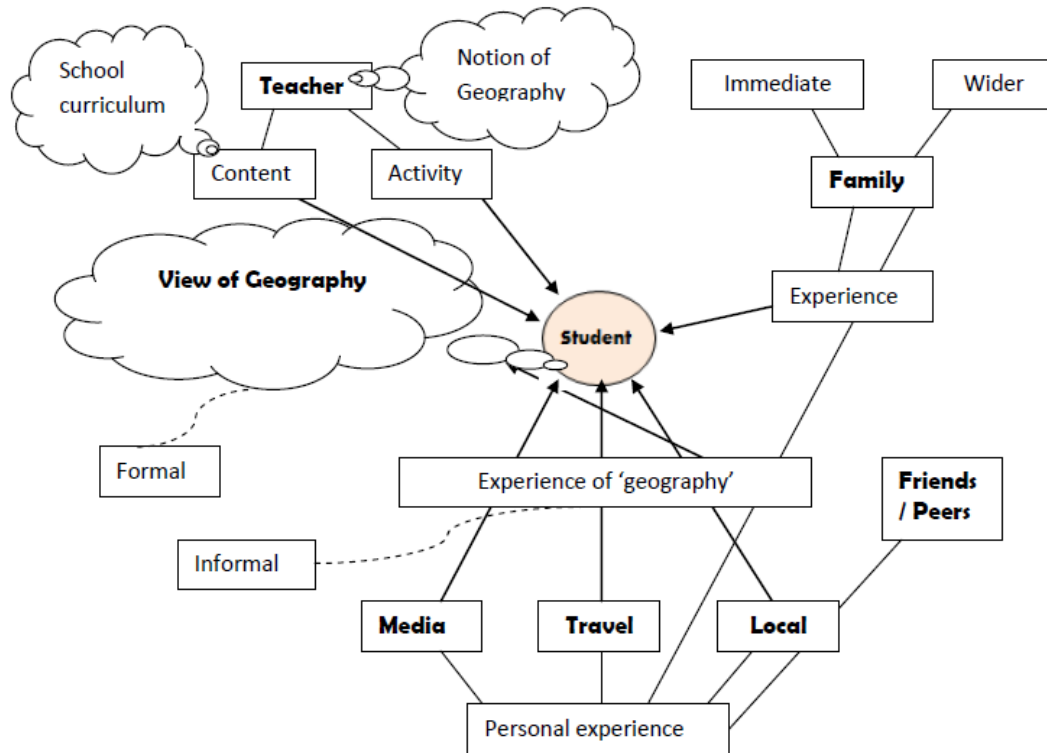


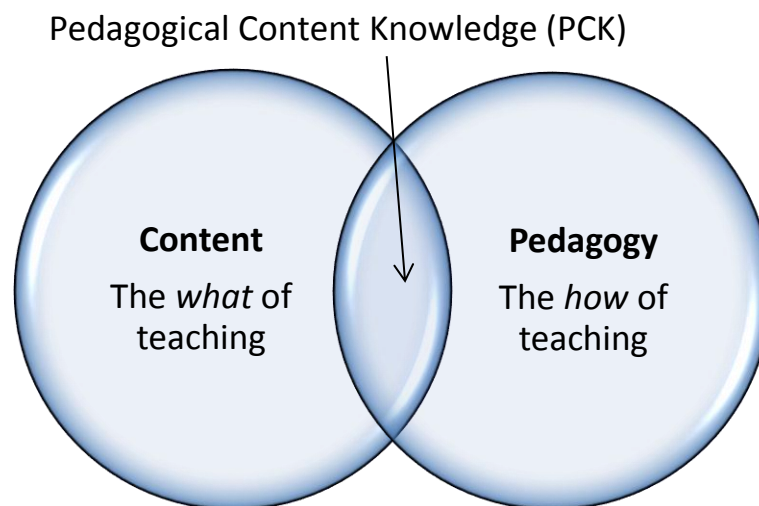
Figure 2.2 Perspective influence theory (After: Kitchen, 2011: 71).

## 2.6 Academic and pedagogic knowledge

Formal geographical knowledge has so far been discussed in relation to academic knowledge, constructed by university geographers and translated by teachers using the structures of the curriculum. However, the Geographical Association (2017: 2) explains that effective teachers of geography possess a different type of knowledge. In addition to having rigorous academic knowledge they also have knowledge of how the subject is learnt by young people and pedagogical knowledge which includes a rationale for appropriate classroom approaches. Shulman (1986) argues that this type of knowledge

lies at the intersection of subject knowledge and pedagogy (Figure 2.3). Termed Pedagogical Content Knowledge (PCK), this is knowledge which teachers have which allows them to present their subject in a way which makes sense to students. It is knowledge which can pre-empt and mitigate misunderstanding and misconception; that which makes a teacher of geography into a geography teacher. Arguably, this is particularly pertinent given that geography classes are increasingly taught by non-specialists<sup>27</sup> who may possess pedagogical knowledge and content knowledge but lack PCK as a result of their minimal teaching experience or piecemeal rather than holistic appreciation of the subject.

The identification of PCK within this research is important because of the role it potentially plays in the shaping of student representations of geographical knowledge (Figure 2.1 and Figure 2.2). It identifies the distinctive bodies of knowledge for teaching; while a specification may identify a topic it is the teacher who organises, represents and adapts this for their students (Shulman, 1986).



*Figure 2.3 The position of Pedagogical Content Knowledge (PCK) (After: Shulman, 1986)*

<sup>27</sup> The majority of geography lessons taught in England to students in Years 7 – 13 are taught by subject specialists (defined as those with a relevant post A level qualification). In 2015 this figure stood at 79.0% although it was the lowest of all the EBacc subjects. In comparison, 91.5% of all English and Maths lessons were taught by specialists while the figure for History was 89.0%. It is also worth noting that the proportion of lessons taught by specialists has decreased in Geography from 91.1% in 2010/2011 and that specialists are typically placed with KS5 and KS4 classes leaving non-specialists in many schools and from many disciplines teaching KS3 (Department for Education, 2016a).

## 2.7 Different types of knowledge

The consideration of different types of knowledge is vital given that different ways of knowing can encourage different ways of teaching, learning and creating the curriculum. Firth (2013) identifies three different ways of conceiving of knowledge; absolutism, relativism and social realism which he discusses in relation to the review of the curriculum by the Conservative / Liberal Democrat coalition government (2010 – 2015). Absolutism, aligned with objectivism outlined at the beginning of this chapter, implies that the curriculum is content driven and the aim of education is to induct students into the dominant traditions of knowledge. This is the scenario which Young and Muller (2010) have termed 'future 1', where boundaries (between knowledge domains and school and everyday knowledge) are fixed, resulting in an under-socialised view of knowledge. Knowledge is treated as given and established by tradition and the route it offers to university (Young, 2014). Within geography, Biddulph (2014) suggests that this cultural transmission model of the curriculum underestimates the inherently dynamic nature of the subject. It also serves to uncouple school geography from the academy which, in turn, marginalises the subject's potential as a vehicle for education as content is inert and irrelevant to students.

The absolutist position of future 1 can be contrasted with relativism or constructivism<sup>28</sup>, where the identification of particular school subjects is less important than generic skills and the aim of education is to learn to learn, preparing students for life and work beyond school. This scenario, future 2, moves towards the end of boundaries resulting in an over-socialised view of knowledge, which taken to its extreme encourages reductionism (White, 2007; Young and Muller, 2010). Again, Biddulph (2014) sees this version of the curriculum within the context of geography as deficient. She argues that the tensions which are created between enquiry and the focus on pre-determined objectives and

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<sup>28</sup> It is worth highlighting that Young's idea of constructivism here is not aligned to that of Crotty (1998) which I have used throughout this thesis. Young holds a stereotyped view of constructivism which he links to a future 2 scenario. However, my (and Crotty's) view of constructivism is more nuanced and aligned with future 3. Young would term this positioning 'realist' rather than 'constructivist' and which is why, when discussing his work, I have chosen to use his terminology.

outcomes result in a geography which is demotivating. There is little room for the student to explore their learning in a scenario which sees the curriculum as product and focused on measurability.

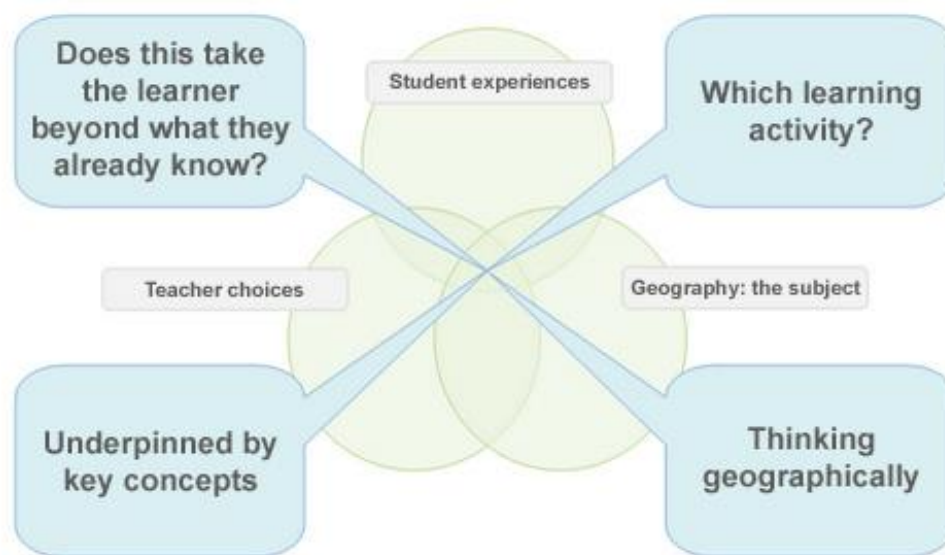
Social realism, the final conception which is given most attention by Firth (2013), has emerged over the last decade as an alternative approach to epistemology and has been pioneered by Young (2008a; 2013a) in a critique of his previous constructivist stance (1971) and in geography by Lambert and the GeoCapabilities project (Lambert, 2014a; Lambert, 2014b; Lambert *et al.*, 2015; Slater *et al.*, 2016). This way of seeing is so called because it rejects the objectivist view that knowledge is given, at least not in any permanent sense, and like constructivism, recognises the central role of humans in the creation of knowledge. It is also realist as unlike constructivism it suggests that knowledge is applied in a way which is context independent and so takes knowledge out of the hands of the powerful and moves students beyond experience (Young, 2008a). However, Young (2013a) is keen to point out that he is not attempting to replace constructivism with realism but instead uses the term to consider constructivism differently. Termed 'future 3', boundaries which exist between disciplines and between the theoretical and everyday are maintained prior to being crossed and provide optimum conditions in which to acquire powerful knowledge (Young, 2008a; Young and Muller, 2010; Young, 2013a). Biddulph (2014) is clear that this is the type of geography curriculum that we want. Unlike future 1 and 2 it does not sit well with a tightly prescribed National Curriculum however, it is the only future which takes students' lives seriously and recognises their role in the creation of knowledge. Their social and cultural capital is valued and serves to act as a bridge between formal, academic knowledge and informal, everyday knowledge; it is this process of tying the two together which makes the result powerful (Roberts, 2017).

These ideas of GeoCapabilities and a future 3 curriculum are tied up with another concept, that of curriculum making<sup>29</sup>. Underlying curriculum making is an understanding

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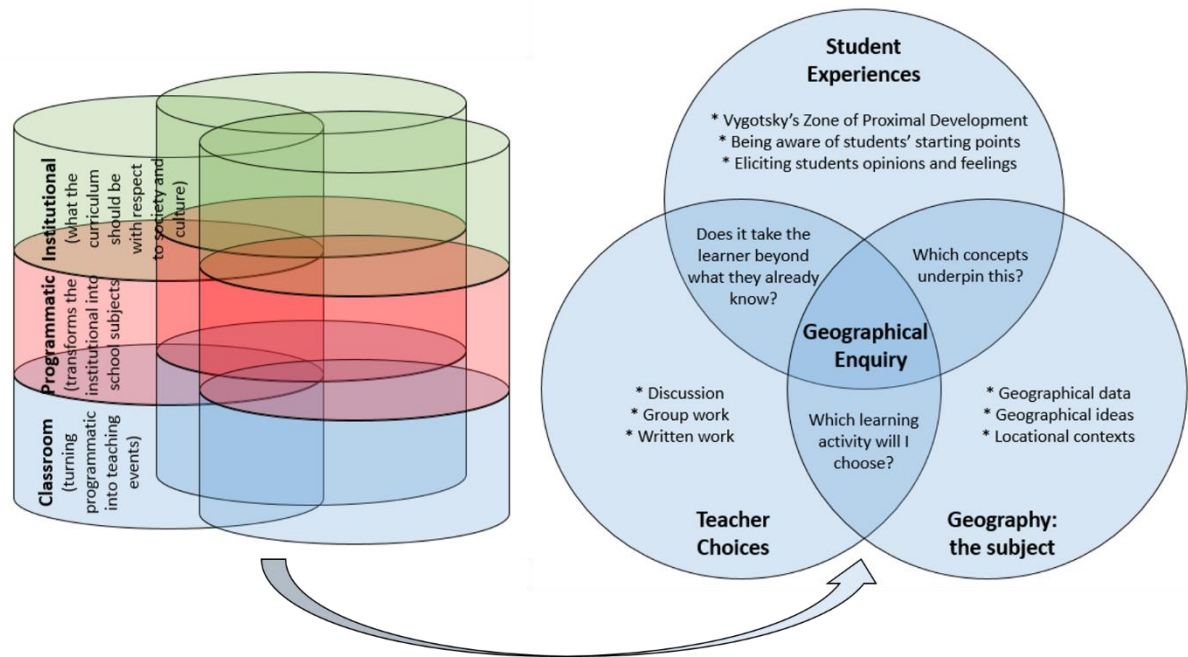
<sup>29</sup> Curriculum making, a term which Catling (2013) has traced back to the beginning of the twentieth century, is similar to the central and northern European concern of subject didactics; it is teaching with purpose.

that teachers and students both interact with specialist subject knowledge but they do so from different perspectives. The role of the teacher is to re-contextualise this subject knowledge, a practical task which is both creative and imaginative but not quite the same as either curriculum design or lesson planning (Figure 2.4). It gives similar weight to student experiences (the ‘who’) as geography as a subject and teacher choices (the ‘what’ and the ‘how’) which is important given that the latter concerns are usually the focus of teachers’ planning. Drawing these ideas together then, a GeoCapabilities approach sees curriculum making as a practical way of creating a future 3 curriculum.



*Figure 2.4 Curriculum Making in geography (After: Geographical Association, 2013a)*

However, taken separately these ideas are problematic. Young and Muller (2010) highlight the simplicity of the future 1-2-3 model in comparison to the complexity of the system which it is used to describe and contend that there are unlikely to be pure versions of any of the futures. Similarly, the concept of curriculum making lacks context; both models are rather two-dimensional. I have therefore taken these ideas and combined them with Deng’s (2009) three-dimensional view to create a more complex, but potentially more effective model of curriculum making (Figure 2.5).



*Figure 2.5 Making the curriculum in geography*

The left hand side of Figure 2.5 focuses on the different layers – the institutional, the programmatic and the classroom – which influence the curriculum and are referenced in Figure 2.1. The right hand side of the model explores the classroom layer in more detail. It re-imagines Figure 2.4 so that the essential components are maintained but also extends it so that geographical enquiry<sup>30</sup> has a central place and key features which Roberts (2011) identifies as being part of a ‘good’ geography lesson are included. The Geographical Association have embraced this re-imagining using it on their forthcoming website to illustrate curriculum making and it has also formed the theoretical basis of a number of professional development workshops for geography teachers in the context of the new GCSE and A level specifications (Kitchen, 2017). Here, I use it to structure the following three sections; each layer is discussed in relation to ontological concerns regarding geographical knowledge.

<sup>30</sup> Roberts (2010) suggests that the definition of geographical enquiry is difficult to determine due to the fact that it is a word regularly used in everyday parlance and personal biographies and experiences can influence the way in which it is understood. Despite this, she conceives of geographical enquiry as an approach to learning that centralises the importance of students’ making sense of things themselves. Four aspects of geographical enquiry can be identified; creating a need to know, using data, making sense of information and reflecting on learning.



## 2.8 Different types of geographical knowledge: the institutional

While I would argue that deciding on what powerful knowledge should be at the core of the geography curriculum is the domain of academic geographers, curriculum content and structure is often driven by government ideology. Young (2008a) highlights opposing political views, with those on the right generally aligning with future 1 (with any attempts to modify the subjects of the curriculum resulting in it being 'dumbed down') and those on the left typically holding the view of future 2 (that the curriculum must respond to market pressures and offer more choice and options related to employment). Politicians pick and choose the research which best supports their policy framework and thus, policies are rarely robust to theoretical critique (Beck, 2012). At a simplistic level, this is like a Newton's cradle, unstoppable in its momentum as it swings from right-wing to left-wing policies which reflect the government of the moment and could be considered to be what has happened in the UK in the recent period of curriculum reform as the coalition Conservative / Liberal Democrat government (2010 – 2015) veered away from the decisions of their previous New Labour contemporaries. However, the situation is more complex as sociologists believe democratisation and modernisation is a global phenomenon. They highlight international similarities in school curricula, which in many ways are very different, to show the curriculum is institutionalised (Young, 2008b). While this argument has been criticised by Dale (2000) as being descriptive rather than explanatory, he does not challenge the idea that national policies have a weak impact on curriculum structure. Coupled with this, politicians do not always conform to their stereotype; for example, the New Labour government (1997 – 2010) held a neo-conservative view of knowledge.

The National Curriculum experienced by the students in this research was published in 2008; a product of a Labour government (1997 – 2010). The theoretical perspective for this curriculum is aligned to future 2 and assumes that subjects are relatively unimportant (they appear only as a small component at the bottom of the second layer) compared to a learner's ability to access a curriculum relevant to their future employment (Yates and Young, 2010; Firth, 2013) (Figure 2.6). This conflicts with the perspective of the previous coalition and current Conservative government (2015 – present) who had a view broadly aligned to future 1. The current National Curriculum (first teaching 2014) was developed within this framework, although Michael Gove, previous Secretary of State for Education and largely responsible for the recent curriculum overhaul, declared his awareness that subjects can change and that the context of knowledge creation is important (Beck, 2012).

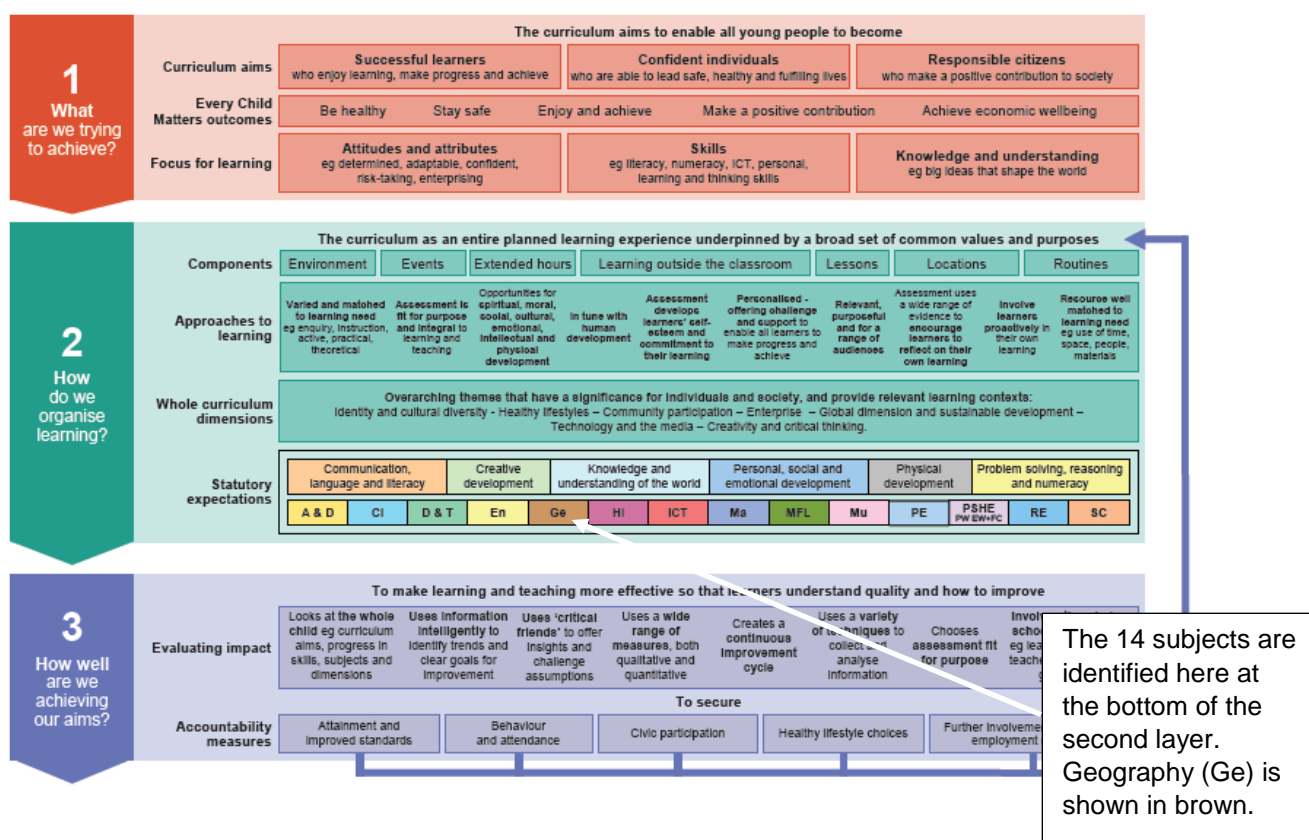


Figure 2.6 The National Curriculum of the New Labour government (After: QCDA, 2007)

Between 2010 and 2014, in his time as Secretary of State, Gove controversially attempted to tackle a range of issues in education which included the revision of the National Curriculum so that it was simplified and focused on the 'core knowledge' of academic subjects rather than skills and competencies. Beck (2012) suggests that he was selective, using partial historical evidence to support contemporary changes. What underpins his thinking however, was a neoconservative perspective which sees knowledge as essential for a cohesive society<sup>31</sup>.

At GCSE and A level, as opposed to KS3, the situation is somewhat different as schools select their specification, and thus, the body of knowledge required to achieve a qualification, from those offered by the four major awarding organisations which operate within the UK<sup>32</sup>. While most of these have their roots and affiliations with universities and, with the new specifications at least, ALCAB had a role in specifying some content at A level (see Section 2.4) the specifications being taught during the period of empirical research were proposed by a Chief Examiner (who may, or may not have had links with the subject at university level). These were then approved and regulated by Ofqual which, like Ofsted, is a non-ministerial government department (Ofqual, 2013). While the new specifications contain common core content and so less room for variation, schools have a free choice in the selection of their specification and can choose different exam boards as awarding organisations for GCSE and A level<sup>33</sup>. Once the specification has been

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<sup>31</sup> The National Curriculum was initially conceived so that all students essentially studied the same subjects and topics and therefore comparisons could be made between the performance of schools. However, in free schools and academies the National Curriculum is not mandatory. The most recent data for the academic year 2014 / 2015 states that there are 6,272 schools in this category which equates to two-thirds of secondary schools and one-fifth of primary schools (Department for Education, 2016b).

<sup>32</sup> While there are a number of organisations who award qualifications for students at this level – for example, Cambridge International Examinations offer an IGCSE – these are usually undertaken by independent schools and can no longer be counted in school league tables (BBC News, 2014). The four major Awarding Organisations referred to here are AQA, Edexcel, OCR and WJEC (re-branded as Eduqas for the new GCSE and A level specifications in England).

<sup>33</sup> In addition, geography specifications tend to come from two very distinct traditions. 'A' specifications adopt a thematic approach defining content into human and physical themes while 'B' specifications adopt a topical issues approach embedded in human interactions with the environment. It is worth noting that for the new A levels each Awarding Organisation has only one specification accredited – there is no 'A' or 'B' suffix. AQA have a thematic approach while Edexcel, Eduqas and OCR have chosen to broadly adopt an issues approach. At GCSE level, three of the four Awarding Organisations have two specifications – one 'A' and one 'B' accredited (although slightly confusingly OCR B is issues based but within a thematic framework). AQA is the only Awarding Organisation to have one specification accredited which is thematic.

selected, most offer an element of choice regarding topics examined, so it is feasible for a student to achieve an A level in geography without studying topics some would consider fundamental<sup>34</sup>. Other dilemmas teachers of exam classes face include the balance between teaching content and exam technique, whether knowledge should be taught for its own sake or simply because it is in the exam and the cultivation of geographical 'jack of all trades' who fare better than their specialist colleagues in the allocation of marks. Given this landscape, it is erroneous to assume that this research is set within a coherent structure of knowledge which progresses from KS3 to GCSE to A level when the reality is anything but<sup>35</sup>.

## 2.9 Different types of geographical knowledge: the programmatic

It is misleading to conceive of the Geographical Association (GA) as having an homogenous view of knowledge as it is composed of approximately 6,500 national and international members each having their own view (Grimwade, 2007). Having said this, there is a pervasive epistemology of constructivism, focus on curriculum making and geographical enquiry (Geographical Association, 2017) which, at times, has led to a metaphorical clashing of horns with the Royal Geographical Society<sup>36</sup>. However, as the GA was at the forefront of discussions with the Department for Education regarding the National Curriculum at KS3 and is, along with the examination boards, a main provider of teacher support given the decline of the role of Local Authority subject advisors, it is worth

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<sup>34</sup> For example, weather and climate is often an option at GCSE level but less likely to be taught as the subject matter is seen as more complex than other options. The 2015 AQA GCSE examiners report highlights this starkly; there were only 7,000 responses to the question on weather and climate compared to 63,000 responses to the question on plate tectonics (AQA, 2015).

<sup>35</sup> Progression between Key Stages is much clearer and well-defined in the context of the new curriculum (Rawling, 2016).

<sup>36</sup> The learned society – the Royal Geographical Society with the Institute of British Geographers (RGS-IBG) - is also an important body which has engaged in talks with the Department for Education and the GA. However, their remit is much broader than that of the GA – geography education is one of several areas of focus, while for the GA it is the main area of focus. Despite being a Fellow of the Royal Geographical Society, the GA is now my employer and so I have chosen to mainly focus on this perspective as it also provides an insight into the context in which I work.

considering the association's position regarding geographical knowledge which is influenced by but transcends the grass roots membership.

The GA have fought hard for the inclusion of geography within all key stages of the National Curriculum and have pushed the consideration of knowledge to the fore over the last few years (Firth, 2011; Lambert, 2013a). The previous Labour government's emphasis on learning and the strong rhetoric which accompanied this encouraged the GA manifesto, 'A different view', which was a response to genericism and the burying of subjects within the curriculum (QCDA, 2007; Geographical Association, 2009a). The manifesto does not explicitly define geographical knowledge but instead uses the analogy of language as a tool for understanding what it is to think geographically. The curriculum consultation document (Geographical Association, 2011a; 2012) makes it clear that this is not everyday thinking and a rationale is developed for handling geographical knowledge which is composed of factual knowledge<sup>37</sup> (knowledge 1) – geographical core knowledge or vocabulary of geography; conceptual knowledge (knowledge 2) – organisational frameworks and models and the principles of organisation, geography's grammar and procedural knowledge (knowledge 3) – including enquiry, disciplinary investigation and applied practical skills. Kinder and Lambert (2011) then add a fourth type of knowledge, that of metacognitive knowledge which includes self-efficacy in learning.

The debate surrounding geographical knowledge is, however, only part of the issue. As discussed in Section 2.6, the curriculum is distinct from pedagogy and the professionalism and expertise of teachers is required to make sense of these different types of knowledge. Additionally, school departments may make sense of these types of knowledge in different ways and create a curriculum which places emphasis on one aspect over the others<sup>38</sup>. However, Kinder (2013), as Chief Executive of the GA advocates a balanced approach which considers knowledge, skills and concepts as essential components

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<sup>37</sup> These types of knowledge are not to be confused with the future 1 – 2 – 3 model of knowledge proposed by Young and Muller (2010).

<sup>38</sup> Reflecting on the curriculum that the geography department created at Claytons, there was an emphasis on developing knowledge 2 and knowledge 3 as we assumed (perhaps wrongly) that students would arrive with a fairly well-developed knowledge 1 and knowledge 4.

required so students can understand geographical issues rather than simply engage with them<sup>39</sup>.

## 2.10 Different types of geographical knowledge: the classroom

While this research is underpinned by the notion that perspectives of knowledge are individual and unique, within the classroom there are two particular standpoints which need to be considered – that of the student and that of the teacher. Research into student perspectives of geography appears divided between large scale, quantitative surveys and small scale, qualitative case studies. There is a dearth of research in this area, particularly by teacher researchers, with most studies navel gazing on the perennial question of ‘what is geography?’ and resulting in little more than tallies of key words which divorce the perspective from the student. A notable exception has been the work of Hopwood (2004; 2009; 2012) and Hopwood *et al.* (2005). His findings mirror those of other studies (Table 2.1) in that students see geographical knowledge as being about the world with secondary foci including countries, lifestyles, issues and natural disasters. However, the research suggests responses are not cohesive and that students see the dynamic nature of geographical knowledge as being a distinctive feature. Adopting a multiple case study approach, Hopwood’s findings also suggest that students, who were in the same class and had the same experiences of lessons, had different senses of school geography.

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<sup>39</sup> This was the approach taken by the 2007 version of the National Curriculum (see Figure 2.6).

*Table 2.1 An overview of recent studies into student perceptions of geography (After: Hopwood, 2011)*

<b>Reference</b>	<b>Methods</b>	<b>Sample</b>	<b>Key findings</b>
Dowgill (1998)	Interviews and diaries completed by the students	Two classes over their 3 years in KS3 from a secondary school in Kent	The traditional view of geography – the interactions and interrelationships between people and the environment through the study of place- was present for all three years but declined during this time. The applied conception – geographical issues studied through enquiry - increased throughout the three years, while the idealistic view – macro questions concerning the environment - did not appear until Year 9.
Biddulph and Adey (2003, 2004)	Written survey and interviews	1,400 Year 9 students drawn from 10 schools across England in initial written survey – a subsample of which were interviewed in Year 11	GCSE geography was seen as being very different to KS3 which was described by students as being 'common sense' and lacking depth. Students found it difficult to articulate the 'usefulness' of geography beyond using maps for locating places. Students identified active, student-centred teaching strategies – investigative work, group work, video, ICT, discussion, fieldwork – as being most enjoyable.
Norman and Harrison (2004)	Questionnaire	1500 Year 9 students from Southern England	A selection of words to convey the meaning of geography was simplistic and mechanical and it was found that subject content as much as the mode of delivery were an issue for the students in the creation of their perceptions. Many students could not remember what they had done in primary school and this resulted in low responses. Mapwork, weather, the location of countries, rivers and volcanoes and earthquakes were identified as being key features of geography.
Hopwood (2004) / Hopwood <i>et al.</i> (2005)	Survey, poster drawing interviews, observation	Two Year 9 classes from one English secondary school	Students see geographical knowledge as being about the world with secondary foci including countries, lifestyles, issues and natural disasters. However, responses are not cohesive even when different sources of information are compared and secondly, students see the dynamic nature of geographical knowledge as being a distinctive feature.
Hopwood (2007, 2009, 2012)	Interviews, observation, photography, concept mapping	Six Year 9 students, two each from three English secondary schools	Students, who were in the same class and had the same experiences of lessons, had different 'senses' of school geography. Individual conceptions may be responsible for students 'seeing' place and space in different ways.

My Masters research drew on Hopwood's work providing a rich, in-depth account of student perceptions of geographical knowledge through six case studies (Kitchen, 2011; 2013a; 2013b). Analysis of written statements, posters, schemes of work and interviews

suggested that student perceptions are focused on place and maps and originate from a variety of sources, although primary school appears to have the greatest influence. However, unlike Hopwood, the main focus of this research was on the role of the teacher in the formation of perceptions. The most interesting finding was that, while students appear to have a 'big picture' of geography – *macro-knowledge* - which they tend not to deviate from, the teacher can influence the depth and detail of these perceptions – *micro-knowledge* - by selective content or activities which engage. The students' simple statement of what geography was, which had been defined in written statements at the start of the research, remained constant throughout – if the content taught resonated with their existing ideas, it served to strengthen and add detail to their view of geography; if not, then it was discarded<sup>40</sup>.

If student perceptions of geography have received little attention, then the same criticisms can be levelled at research into the perceptions of their teachers, at least those who have some experience in the profession.<sup>41</sup> Brooks (2006) found that, despite operating within the same institutional framework, experienced teachers had different understandings of geography and approaches to teaching. These were influenced, albeit indirectly, by their engagement with academic geography; for example, teachers who had attended university in the 1960s during the quantitative revolution, tended to have a positivistic view of the subject. Brooks (2010) further suggested that understanding teacher subject expertise is important as it provides a lens through which the teacher can make sense of their work and helps 'to illuminate why generic initiatives only 'speak' to teachers if such initiatives already fit in with their ideas about teaching geography' (Brooks, 2010: 148). Walshe (2007) had similar findings to Brooks (2006; 2010) in her work with experienced teachers. She found that their views of geography's 'big concepts' were individual and, in some cases, different to those published within the literature. However, she identified three concepts which appeared to be common; planning (management and decision

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<sup>40</sup> The terms *macro-knowledge* and *micro-knowledge* are introduced here and are not explicitly defined within my Masters dissertation or subsequent published articles. This concept and terminology is more fully explored with Part III and specifically Chapter 10.

<sup>41</sup> Most research focuses on the perceptions of those training to be teachers, presumably because as participants, they are easily accessible and more likely to formally reflect on theoretical matters compared to their more experienced colleagues.



making), place (seeing inequalities and challenging ideas) and process (learning about how the world works).

Barratt Hacking (1996) explored perceptions of secondary PGCE geographers and suggested they hold a range of perspectives and interests. They have strong feelings about particular aspects of the subject but these are suspended in initial thinking and planning. In a similar vein, Walford (1996) asked postgraduate geographers who joined a specialist teacher training group to write a definition of geography. Analysing these he produced a categorisation of perspectives which was dominated by interactionists (those that highlighted the link between the physical and human environment), with smaller numbers categorised as synthesisers (who stressed geography's role in synthesising from different disciplines), spatialists (with a focus on spatial aspects) and placeists (who demonstrate a view which focuses on the specific features of actual places to develop a sense of place).

Those engaged in the training of primary school teachers have also drawn on the work of Walford (1996) in an attempt to classify perspectives with Catling (2004) identifying five categories of perception when analysing primary trainee's images of geography; those of globalists (who focus on global environments and the world), earthists (who focus on the description and explanation of patterns and processes relating to how the world works and highlight thematic understanding of both human and physical geography), interactionists, placeists and environmentalists (who highlight issues of the environment and sustainability). While these different categories of perspective have the potential to lead to confusion, the diversity of view is a consistent element. This notion of perspective categorisation is one that I find theoretically compelling and useful as a framework. Therefore, I have taken Walford (1996) and Catling's (2004) work as a starting point for my analysis of questionnaires (Chapter 7), collages and interviews (Chapter 8 and Chapter 10).

Martin (2000) carried out research into primary trainee teachers' perspectives of geography and the relationship between these and their subsequent teaching. She

determined that their image of teaching geography, the pedagogy outlined in Section 2.6, may be a more powerful indicator of teaching style than their image of academic geography and that most perspectives were knowledge orientated. More recent research by Catling and Morley (2013) highlights that while primary geographers value the role of geographical knowledge within their teaching their deeper understanding of knowledge is unclear and tends towards the general rather than specific.

## 2.11 Why focus on students' representations of geographical knowledge?

Simplistically, student views can be defined in two ways – those that deal with the nature of the subject and those which pass judgement on the subject in terms of its usefulness or relevance (Martin, 1999; Hopwood, 2012). Studies from other school subjects, notably history and science, recognise that students typically articulate both aspects, although a detailed exploration of how these relate to each other is limited. Hopwood (2012) does attempt this but concludes the relationship is unique and complex; for some students their view of the nature of geography aligns with what they believe to be important while for others the subject is perceived seemingly separately from the values they express.

Overlain on to this are other aspects of subject perspective which are necessarily diverse and include, but are not confined to; definition, dynamism, relationships with other subjects, scope and epistemological concerns (Stodolsky and Grossman, 1995; Foss and Kleinsasser, 1996; Lunn, 2002). Hopwood (2004) and Hopwood *et al.* (2005) distil these aspects into just three; knowledge, skills and values, although they acknowledge imposing artificial divisions simplifies the complex and dynamic relationships between them. Indeed, their evidence suggests that while perceptions relate to these aspects they also involve ideas which do not fit neatly into these categories. These findings reflect research from science education which suggest that, not only are student perceptions individual, complex and dynamic, but also vary in different contexts (Driver *et al.*, 1985).

Given this complexity, why focus simply on student representations of geographical knowledge? Partly this is a matter of scale. I have introduced the dimension of ethnicity through which to view student representations which is absent from Hopwood's work and while he is able to deal with three aspects, a consideration of more than one would generate too much data and make an already complex thesis unmanageable. So, given my decision to select just one aspect, why knowledge? At the very least it seems the most pertinent given the current political climate and recent 'knowledge turn'. In order to champion a future 3 rather than being railroaded into a future 1 curriculum which would align more straightforwardly with the dominant political discourse, we need a clearer understanding of different types of geographical knowledge. In particular we need to explore how specialist knowledge differs from the everyday and how they relate to each other; aspects that this study addresses (Young, 2008a). It is also crucial that we understand how students view geographical knowledge; the aspects they deem to be important and how they see this knowledge within the context of their lives. For we are not truly valuing their lived experience and the role it plays in developing powerful knowledge if we do not do this. Yet, on its own, this reasoning lacks authenticity for while listening to students is an outcome, the stimulus is government policy. Instead, I am starting with the students who, despite a curriculum context which may not have knowledge at the fore, when asked to define geography, it is knowledge that they engage with initially (Norman and Harrison, 2004; Hopwood *et al.*, 2005; Butt, 2008).

## 2.12 Conclusion

My own view of geographical knowledge has, so far, been in the background; a deliberate decision as I did not want my personal perspective to colour the discussions of others'. However, for the reader to gain an appreciation of how I view geographical knowledge it is worth pausing to be epistemologically self-conscious and to question my view of knowledge and geography as a school subject.

Using Crotty's (1998) definition, I hold a constructivist epistemology with a view of knowledge not dissimilar to that of Young's future 3. As referred to previously, this is mainly due to my formal educational experiences (see Brooks, 2006; 2010) but is also pragmatic as this view of knowledge serves me best as a geography educator. However, while I have been clear in my epistemology I have not reflected upon my personal definition of geography. In order to clarify my thinking on this matter I ranked the eight statements in Table 2.2<sup>42</sup> with those statements closest to my perception ranked 1 and the furthest ranked 8.

*Table 2.2 The eight statements ranked in answer to the question 'What is geography?'*

1.	Geography develops an informed knowledge and understanding of the world, its human and physical features and environments and of the countries of the world.
2.	Geography is the study of people's lives and activities in places, communities and cultures to understand what they are like, why they are as they are, what this means for them and how they relate to others.
3.	Geography draws on a variety of disciplines, knowledge and understanding about people, places, cultures, the physical world and their interactions to develop a sense of global responsibility for managing human engagement with the Earth.
4.	Geography studies the spatial distribution, relations, processes and consequences of the interaction of physical and human phenomena over the surface of the Earth.
5.	Geography studies the Earth, its physical and human features and environments and the forces and processes that shape them.
6.	Geography investigates environmental matters, concerns and issues and sustainability, locally and globally, liked to generating a sense of personal and communal responsibility for the Earth, its people and its environments.
7.	Geography investigates the interactions between and the independence of people and their natural and social environments, of the processes that sustain these interrelationships and of their impacts and influences on people and the natural environment.
8.	Geography develops knowledge of where features and places are on the Earth, to build an awareness of the wider world.

Reflecting on these rankings, those statements at the bottom of the table contain elements of geography in which I have less interest such as environmental sustainability,

<sup>42</sup> These statements were not selected by me but by Emma Morley who was carrying out research into English primary teachers' perceptions of geography (see Morley, 2012). This exercise was carried out in April 2012 in a workshop at the Geographical Association conference before embarking on my research.

or aspects which I find challenging such as locational awareness. This does not mean I would not teach them; on the contrary these are probably the elements in which I instruct my students most effectively. However, it does highlight my hybrid identities and differing views of myself as a geographer and geography educator. It is also interesting to note that knowledge and understanding is a key feature of the statement ranked 1 while knowledge in isolation is part of the statement ranked 8. This perhaps highlights the importance I place on knowledge which is not simply for its own sake but which has context and understanding embedded within it.

This process masks the complexity of my discourse and also its dynamic nature. I first carried out this exercise five years ago and while I would still rank the statements in the same way, I am acutely aware of how my view has changed since I started work at the Geographical Association. In particular, I have a more fully developed view of the importance of fieldwork and its relationship with geographical knowledge, yet these subtle changes and processes of thinking are masked by the outcome. How can multiple experiences, both formal and informal, which grow and change over time, be distilled into a single sentence and, even if they can, whose interpretation of this single sentence is dominant? Yet, Kitchen (2011) underlines the importance of this single sentence; if content taught to students resonated with their macro-knowledge of geography it served to add detail to their understanding, if it did not then it was largely ignored. Does the same apply in my role as a teacher? After all, I am the one involved in curriculum design and regularly make decisions about what should and should not be taught. While a resolution to these issues is impossible and undesirable – do we want to strip out the messiness, the essence of the discourses, simply to give clarity? – it is worth bearing in mind that this is the lens through which I am viewing the students' stories and the same considerations and dilemmas apply (Butt, 2010).

In the introduction to Part I, I explained that this exploration of the literature would discuss the three central concepts of geographical knowledge, ethnicity and subject choice so that the reader might better understand the thesis. Having discussed the debates

surrounding the first of these concepts in this chapter, I now turn to the second – ethnicity  
- in the chapter which follows.

## Chapter 3

### A discussion of the debates surrounding the definition of race and ethnicity and its context within school geography in England

#### 3.1 Introduction

In Chapter 1, the data generated at both a national and school level was a function of the students indicating (or in some cases, refusing to indicate) their ethnic group from a pre-determined and nationally recognised classification system – that used by the Office for National Statistics for collecting census data. However, this classification is problematic on a number of levels. Firstly, the narrow range of groups from which to choose is not useful for those of a diverse heritage or those who regard themselves as culturally British but have a mixed ethnic parentage (Bird, 1996). Bonnett and Carrington also argue that, as a result of the categories having colonialist roots, such a process is, ‘at best essentialist and at worst racist’ (2000: 488). Secondly, Brubaker (2004) suggests that as soon as ethnic minorities are grouped they are seen as static, determinate and homogenous – the similarity becomes central, hiding differences between people within the group. In addition, if people are continually grouped – which also raises questions as to who is doing the grouping and therefore wielding the power – then they are likely to assimilate and adopt the characteristics of the group, thus creating a single ethnic story (Adichie, 2009; Martin, 2012). I agree this is highly problematic, particularly from a social constructivist perspective which sees race and ethnicity as dynamic over both space and time and complex. However, I am also working within an object-based western context which tends to group with a discernible boundary and appreciate the convenience of being able to discuss ethnic groups using a simplified vocabulary. This chapter will therefore, define the key terminology which I will consistently employ (Section 3.2) and outline the lens through which this research will be viewed (Sections 3.3 and 3.4). Due to the vast literature base which lies at the intersection of ethnicity, education and

geography, I have identified two questions to organise my thinking: 'What are the main areas of research for education researchers regarding ethnicity?' (Section 3.5) and 'What are the main areas of research for geographers regarding ethnicity?' (Section 3.6). These provide insights into the definition of terms and research coverage in both contexts.

### 3.2 Defining the key terminology

While defining key terminology is an important aspect of any research, when focusing on race and ethnicity it is vital as not only are the terms part of our everyday language and therefore laden with ambiguity and personal meanings, but also the language is used to 'differentiate, (dis)advantage, and (dis)empower each time it is uncritically invoked' (Hylton, 2012: 36).

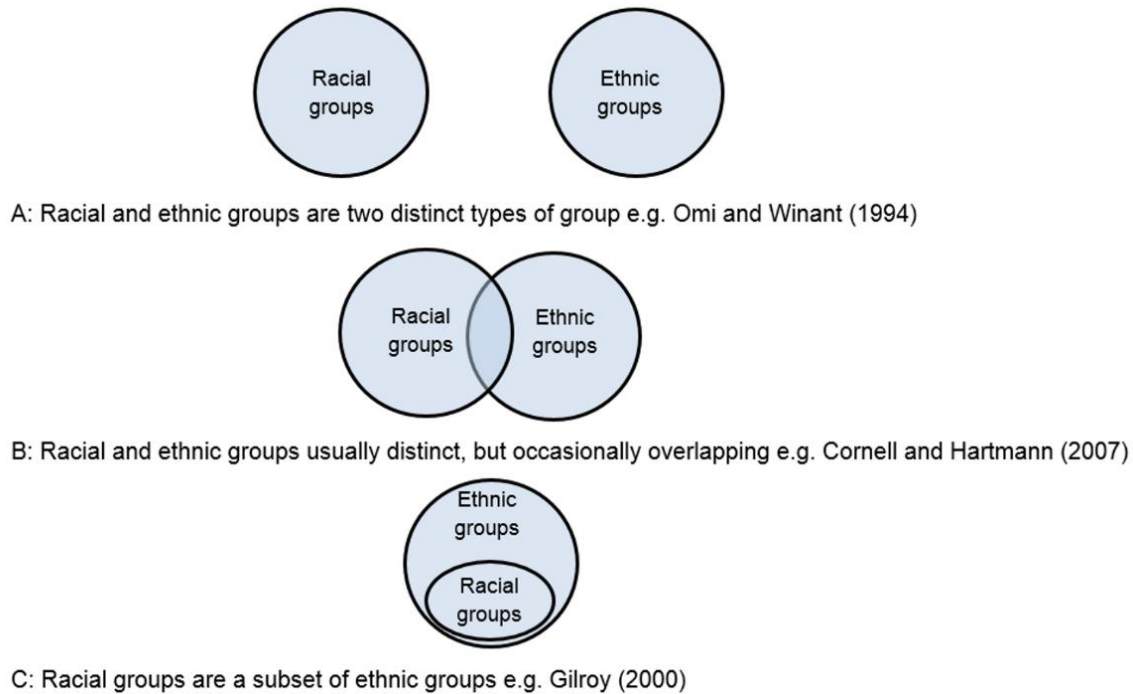
Superficially, the differences between race and ethnicity seem clear. Race is concerned with the biological differences – skin colour, eyes, hair etc. – between groups of people. The term has a very particular imperialistic history and tends to be defined by the powerful existing outside the group (Jackson, 1995; Hiebert, 1995; Kivisto and Croll, 2012). Ethnicity instead is a self-defined group existing within wider society which has 'real or putative common ancestry, memories of a shared past, and a cultural focus upon one or more symbolic elements which define the group's identity, such as kinship, religion, language, shared territory, nationality or physical appearance' (Bulmer, 1996: 35). Reality is much more complex than these definitions suggest and most modern commentators agree a social constructivist approach where race and ethnicity are seen as being dynamic, multifaceted and dependent on social and political processes, as opposed to this essentialist approach which sees race and ethnicity as static and inherent (Giles and Middleton, 1999; Andreassen, 2000; Smedley and Smedley, 2005; Shih *et al.*, 2007).



Kivisto and Croll (2012) reduce the complex relationship between racial and ethnic groups<sup>43</sup> to three viewpoints (Figure 3.1). The first suggests that racial and ethnic groups are distinct; people therefore can only belong to one group. The main proponents of this view, Omi and Winant (1994) who were working in a US context, argue that the term 'ethnicity' should be used to refer, for example, to voluntary immigrants from Europe, while 'race' is more apt for discussing African Americans and Native Americans. They suggest that these groups have different historical experiences and levels of prejudice, discrimination and oppression (Omi and Winant, 1994; McWhorter, 2005). This perspective is problematic as while acting under the guise of social constructivism and treating ethnicity as such, this dichotomy essentialises race. Additionally, the authors were writing before the advent of Whiteness studies where voluntary White European migrants were viewed as having non-White characteristics, blurring these distinct boundaries (Bonnett, 1998). The second view addresses these problems by viewing race and ethnicity as different but suggesting instances where the boundaries become blurred; they are not mutually exclusive (Cornell and Hartmann, 2007; Brubaker, 2009). In particular, Cornell and Hartmann (2007) argue that race tends to be given to groups by powerful outsiders while ethnicity is often claimed by the groups themselves. The final perspective assimilates the two terms to provide an analytical model. It suggests that race is one feature, along with language, history, culture etc. and these combine to create ethnicity (Kivisto and Croll, 2012: 11). While they do not go so far as Patterson (1997), who suggests that the term race should be abandoned altogether, they, along with Wallman (1986), Olzak (1992), Fenton (1999) and Gilroy (2000) do suggest that ethnicity is a more useful term with which to engage, due to its breadth and the fact that it is not as aligned with prejudice in the public eye as the construct of race.

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<sup>43</sup> Brubaker (2004: 11) raises concerns about viewing race and ethnicity as 'groups'. However, as Kivisto and Croll (2012: 4) explain, this is how people generally view race and ethnicity and therefore, if properly understood, this language acts as a convenient shorthand.



*Figure 3.1 The relationship between race and ethnicity (After: Kivisto and Croll, 2012: 5).*

On one hand, it could be suggested that this model is fundamentally flawed as it engages with the grouping of race and ethnicity which, as previously argued, is problematic. Brubaker (2009) suggests alternatives in the form of process orientated definitions, moving away from what race and ethnicity *are* towards a discussion of how they *operate* (Boxill, 2001; Wimmer, 2008) and the exploration of change over space and time (Chandra, 2008). Cognitive definitions have also been suggested which see race and ethnicity not as things *in* the world, i.e. as being 'out there', but as perspectives *on* the world, i.e. constructed by people and a way of seeing (Brubaker, 2004). Yet, eliminating unifying categories of ethnicity (even if they are artificial) renders the stimulus of this research identified in Chapter 1 as non-existent – if there are no ethnic groupings then there is no over or under-representation. As well as being impractical, it is likely that unproductive and inconsistent divisions on the basis of race, class and culture would arise as an alternative, creating a raft of additional problems and issues (Preston, 2010; Cole, 2012). As Dorling states:

*'Without labelling we could not begin to understand how the world works and, most importantly, because there is a little truth in the labels...As long as we realise the damage they can do, the arbitrariness of their imposition and their intangibility and ephemerality, then we should use them.'*

Dorling (2005: 63).

Given these viewpoints, and for the purposes of this research which methodologically will require the selection of students along ethnic lines, I adopt the third perspective where race is a social category which exists only through language, which agrees with Brubakers' perspective on the world (Brubaker, 2009; Morgan, 2002). A dominant reason is that the discipline of geography has a long and uncomfortable history of racism, with textbooks viewing colonial societies through 'imperial eyes' (Hudson, 1977; Kobayashi and Peake, 1994)<sup>44</sup>. While there have been recent attempts to overcome this legacy, implicit racist assumptions are still common within the discipline (Driver, 1992; Livingstone, 1992). I will therefore use the terminology 'ethnicity' and 'ethnic group' as defined by Bulmer (1996: 35), as this is used by the Office for National Statistics and is appropriate within a UK context (Office for National Statistics, 2003). I also use the term 'ethnic minority' to describe those who identify as being non-White British. However, while I appreciate the pragmatic need for groupings, this research is shaped by my cognitive view of race and ethnicity which is more focused on how these individual features shape the students' stories, are used to make sense of their experiences and to interpret students' geographical knowledge. Assuming that the students themselves identify with these categories it is, as Bourdieu (1991) suggests, concerned with ethnicity as a lens through which students view and construct their world.

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<sup>44</sup> During the late 19<sup>th</sup> century, geography was seen to be important so that children could understand the world in which they were being brought up (Bonnett, 2003). While on the surface this appears a laudable aim, 'the world' at the time was one dominated by a rapidly expanding British Empire and geography was important mainly so that citizens were aware of their newly acquired possessions and the limits of their travel. The world was seen as Anglocentric and emphasised and exaggerated 'difference' according to a White British norm. Thus, distant places and the people who lived there were viewed with a mixture of awe, strangeness and wonderment (Walford, 1996).

### 3.3 Identifying a suitable theoretical approach to the study of ethnicity

Having defined the terms 'ethnic group' and 'ethnic minority' in the previous section, here I describe my journey to find a suitable theoretical perspective on ethnicity. According to Andreotti (2007) it is important to recognise our own worldviews and the ontological and epistemological foundations of these, as for transformational learning to take place, we need to 'learn to unlearn'. Extending this idea, Brooks *et al.* (2008) identify the iterative nature of this process and the importance of constantly re-evaluating assumptions and worldviews in the light of new information.

I have always had an interest in 'others' and yet, at the outset of this research I felt my past 'othering' was awkward and naïve. While it could be argued that the 'other' – those who are different – needs to exist to understand oneself, Foucault suggests it implies an 'us and them', knowledge and power relationship which, given the context borders on the unethical (Gutting, 2005). Additionally, the idea of the 'other' is so broad – potentially covering a range of characteristics including ethnicity but also gender, socio-economic status, age, geographical location etc. – and includes everyone who is different to me, that it ceases to be specific. The same criticism can be levelled at an alternative theoretical construct, intersectionality, which examines how gender, class, race, sexual orientation and other groupings of identity inter-relate so that each person holds multiple identities; ethnicity merely becomes *a* factor rather than *the* factor in this research (McCall, 2005; Verloo, 2006).

Two alternative approaches to othering and intersectionality which centralise ethnicity and appear in much geography education research, are multiculturalism – which suggests prejudice is a result of ignorance and celebrates different ethnic groups as distinct from the cultural mainstream - and anti-racism – which, as a critical response to multiculturalism, examines processes such as colonisation and imperialism, which have led to some cultures being dominant over others (Short and Carrington, 1996; Anthias and Lloyd, 2002).

Postcolonialism and Critical Race Theory (CRT) as lenses of anti-racism, arose out of, and became a critical response to oppression, both arguing that racism is an inbuilt, macro-level feature of society (Kivisto and Croll, 2012). Postcolonialism, as an academic movement, began in the latter half of the 20<sup>th</sup> century in previously colonised countries such as India and Algeria as they gained independence. Scholars attempted to explain how the legacy of colonisation had influenced cultures and relationships in opposition to the discourse of the dominant, White, western world (Jackson, 1995). In contrast, CRT has only become a feature in UK based educational literature in the last decade (Parker and Lynn, 2002; Gillborn, 2008; Chakrabarty *et al.*, 2012). Its two premises are that race is central over class, making it generally at odds with Marxist discourse (Delgado, 2003) and the concept of 'White supremacy' which is covert and inbuilt into society and reinforced by its structures (Cashmore, 1996; Cole, 2012). This has led to a focus on 'Whiteness' as a cultural phenomenon of privilege and power where Whites are 'not particularly cognisant of their own race, or of the racialized nature of their position in society' (Kivisto and Croll, 2012: 55). Being an activist scholar does not sit comfortably with me, neither is the aim of the research to reveal and combat inequality and injustice and other lenses were therefore considered.

Multiculturalism arose out of a perceived need to reflect the experiences and perspectives of the new wave of immigrants from Pakistan and the West Indies after World War II (Morgan and Lambert, 2003). It has been fiercely critiqued by anti-racist educators who suggest such a stance is essentialist, simplistic and too focused on culture as opposed to race (Troyna, 1987; Short and Carrington, 1996; Walford, 2001; Anthias and Lloyd, 2002). While I do not see this last argument as being necessarily problematic, I find the argument that it has had little impact on the realities of education due to 'the inherent monoculturalism of school practice and the wider processes of power relations and inequality', compelling (May, 2005: 1). It was therefore also unsuitable as a theoretical lens for this research.

At somewhat of an impasse and, in the iterative spirit of Brooks *et al.* (2008), I re-visited the theory of intersectionality in light of reading Stanfield (1993). He identifies two

epistemological fallacies associated with research into race and ethnicity; homogeneity and monolithic identity. He suggests there is much work to be done to both celebrate the diversity of ethnic experience and to explore the interplay of different facets of identity of which ethnicity is but a part. The stimulus of my research was rooted in an interest in ethnicity and yet, I could not get away from the fact that my students were, among other things, all females, of high-ability and of relatively high socio-economic status. Taking these together, I realised that the authenticity of this research was dependent upon my appreciating multiple facets of each students' identity; intersectionality therefore was a suitable lens to inform my empirical work. Having outlined my journey and decided upon intersectionality as a suitable theoretical approach, the following section provides a discussion of this lens.

### 3.4 The theoretical lens: intersectionality

Intersectionality can be variously described as 'an awareness, an approach, an analysis, a tool, a strategy, a method and a theory' (Goswami *et al.*, 2014: 1). This vagueness has left it open to critique from those who equate a lack of definitional precision with a lack of conceptual precision. Yet, the authors argue that the open-endedness is deliberate and it is more important to understand what intersectionality does rather than debate what its definition ought to be. This particular way of thinking, regardless of definition or discipline, enables the consideration of the problem of sameness and difference and its relation to power which is central to this research (Cho *et al.*, 2013).

The term 'intersectionality' was coined in 1989 by Kimberlé Williams Crenshaw, an American critical legal race scholar. However, the central ideas of intersectionality – the understanding that humans are shaped by the interaction of different social locations, power relations and experiences – have a long history both within and beyond the United

States (Hankivsky, 2014). It was embraced by third-wave feminism<sup>45</sup> which emerged in the 1990s and recognised multiple facets of women's' identity. As a consequence, the number of studies and variety of disciplines centralising intersectionality has grown dramatically over the last two decades (*ibid*).

For the purposes of this study, I use the definition of intersectionality by Davis (2008: 68) as 'the interaction between gender, race<sup>46</sup> and other categories of difference...and the outcomes of these interactions in terms of power.' This is the definition used by Konstantoni *et al.* (2014) for their seminar briefing on intersectional childhoods within the UK and is therefore appropriate for my research which is contextually similar. However, I also find the diagrammatic definition of intersectionality by Simpson (2009) useful to demonstrate the complexity of each person's unique circumstances of power, privilege and identity. In Figure 3.2, I have modified Simpson's original diagram to highlight those aspects which are central to this research.

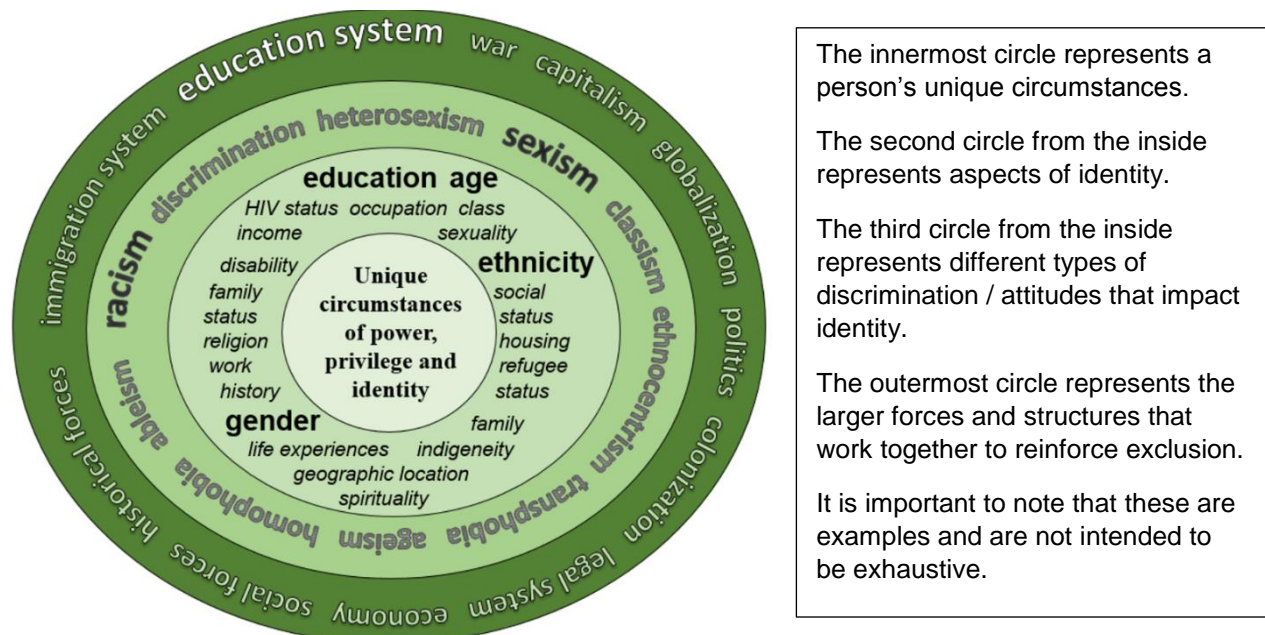


Figure 3.2 The complexity of intersectionality (After: Simpson, 2009)

<sup>45</sup> First-wave feminism is the term used to refer to 19<sup>th</sup> and early 20<sup>th</sup> century mobilisation of obtaining voting rights in Europe and North America. In the UK, most first-wave feminist were upper middle class White women concerned with education, employment and marriage laws. Second-wave feminism emerged in the late 1960s and early 1970s as a new social movement dedicated to raising consciousness about sexism and patriarchy e.g. equal rights and legalisation of abortion. In the UK it was based in working class socialism (Pond, 2011).

<sup>46</sup> As explained in Section 3.2, I use the term 'ethnicity' rather than 'race' throughout this research.

Intersectional research can be classified into three types (Cho *et al.*, 2013). Firstly, research that focuses on theory and methodology, secondly, political interventions which employ an intersectional lens and thirdly, those that apply an intersectional framework of analysis. While Cho *et al.* acknowledge that there is fluidity between these groups they also suggest that this is a useful categorisation for understanding how individual research projects mobilise intersectionality as a tool or theoretical framework. This research is perhaps most aligned to the third type which adapts or builds upon intersectionality to provide an analytical framework for context-specific research. However, it does not sit entirely comfortably within this category as the examples given resonate with critical studies and anti-racist traditions. Given my previously stated discomfort, this begs the question as to whether intersectionality is a suitable lens for this research. However, intersectionality provides a focused awareness on the experiences of people and the way in which those experiences are shaped by social dynamics and forces. As Goswami *et al.* (2014) highlight, an intersectional approach recognises ethnic minority perspectives in ways which are often hidden in plain sight. It also allows their reality to be expressed in ways which are sufficiently complicated to challenge the notion of a single story (Adichie, 2009).

Perhaps the most compelling argument for adopting the lens of intersectionality in this research is the fact that to explore the under and over-representation of students there needs to be an acknowledgement that students have a variety of social identities and that these are situated within a range of power relations. Gender, ethnicity, socio-economic status and sexuality are central to the students lived experience which provides an important role in shaping their perspectives and identities. Social identities are not monolithic and intersectionality provides an integrated approach to studying this complexity (Bilge, 2010). I have been clear throughout this part that the experiences and voices of students are central and thus, an intersectional approach allows for students to be heard in a way which is authentic.

The inherent complexity of adopting intersectionality as a theoretical framework in published research has resulted in questions regarding the robustness of its associated



methods and methodologies. Phoenix (2006) details recurrent criticisms of the approach as lacking a strong foundation of associated methods. However, McCall (2005) sees diverse methodologies as an inevitable and not necessarily unwelcome side effect of the multiplicity of facets that are investigated as part of any intersectional research<sup>47</sup>.

The literature regarding ethnicity (both from a monolithic and from an intersectional perspective) is vast and comes predominantly from the fields of anthropology and sociology of education. In order to marshal that which was relevant to this thesis, I came to the literature with two key questions: 'What are the main areas of research for education researchers regarding ethnicity?' and 'What are the main areas of research for geographers regarding ethnicity?'. Summaries of the key themes that emerged in a UK context are described in Sections 3.5 and 3.6 respectively.

### 3.5 A summary of ethnicity studies in education research

Ethnicity is a major factor which influences the educational experiences of students in the UK yet, many papers on the topic are subsumed into more general papers regarding pedagogy and policy (BERA, 2013). Stevens (2007), in a review of the research literature in England between 1980 and 2005 identified five different research traditions:

*Political Arithmetic* – investigates the relationship between educational inequality and ethnicity by describing general performance over time (largely quantitative with large data sets)

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<sup>47</sup> McCall (2005) identifies a typology of three methodological approaches; anti-categorical complexity, inter-categorical complexity and intra-categorical complexity. An anti-categorical complexity approach sees society as complex and fluid. This perspective, primarily guided by poststructuralism, recognises that identities are culturally and socially constructed and challenges the finite categories of social definition. An inter-categorical complexity approach sees a strategic use of existing analytical categories so that the dynamic relationships of inequality among and between social groups can be detailed. An intra-categorical complexity focuses on transgressive social groups crossing the boundaries of existing categories such as those identified in the earlier part of this chapter. It is this approach which is most relevant here, as it suggests that to understand the perspectives and experiences of ethnic minority students, the social settings where oppression intersects - the context of the school and the geography classroom - need to be investigated.

*Racism and racial discrimination in schools* – explores how school selection processes, an ethnocentric curriculum and White teacher's racist behaviour inform experiences and outcomes of ethnic minority students (largely ethnographic and qualitative)

*School effectiveness and school inclusion* – investigates characteristics of effective schools for specific ethnic groups (largely quantitative with large data sets)

*Culture and Educational Outcomes* – explores ethnic minority cultures and how these influence the outcomes of ethnic minority children

*Educational markets and educational outcomes* – investigates how the changes in the English education system inform the educational experiences of ethnic minority groups in pursuing educational opportunities.

Reading the more recent research literature, I further identified two key themes; the dynamics of inequality in describing and explaining ethnic differences in levels of achievement and attainment (Hansen and Jones, 2011; Bradbury, 2011; Goodman and Burton, 2012) and the evaluation of strategies such as the Ethnic Minority Achievement Grant (EMAG)<sup>48</sup> which are designed to combat these inequalities (Cunningham *et al.*, 2004; Tikly *et al.*, 2005; Kyambi *et al.*, 2007).

While many of these studies have ethnicity as a single focus, some have been intersectional. For example, research by Gillborn and Mirza (2000) using data from the EMAG found a difference in educational attainment according to social class, race and gender in their study of 118 Local Authorities. While social class and gender differences were associated with differences in attainment, neither could account for persistent inequalities according to ethnicity; African-Caribbean, Pakistani and Bangladeshi students were particularly disadvantaged. However, it is not just students from ethnic minority backgrounds which have been the focus. There is a growing body of literature

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<sup>48</sup> Between 1999 and 2011 the Ethnic Minority Achievement Grant (EMAG) was distributed by the Department for Education to Local Authorities with the aim of narrowing 'achievement gaps for those minority ethnic groups who are underachieving and to meet particular needs of pupils for whom English is an additional language' (NALDIC, 2015).

on the underachievement of White, working-class boys, particularly within the field of educational sociology (Gillborn and Kirton, 2000; Cassen and Kingdon, 2007; Strand, 2008; Stahl, 2012; Stahl, 2013; Stahl, 2015).

Research on segregation within education has largely been knowledge-for-action to inform policy makers and has been focused on specific geographical areas such as Oldham, Bradford and Burnley where ethnic minorities make up the majority of some localised populations and riots in 2001 were blamed on the polarisation of ethnic groups within schools and communities (Burgess and Harris, 2011; Vasagar, 2011). A unifying characteristic is the focus on multi-ethnic schools which are typically urban and which have a significant proportion of students from ethnic minority backgrounds (Bonnett, 1997; Cline *et al.*, 2002).

This review of the literature revealed a paucity of qualitative education research focused on ethnic minority students' views of subjects. Coupled with this, there is limited research in contexts which have a significant majority of White British students. It follows that this research has the potential to illuminate themes and contexts which have previously been largely ignored. The intersectional literature also reassured me that adopting this theoretical lens could result in research which took multiple facets of identity into account without compromising its stimulus or direction.

### 3.6 A summary of ethnicity studies in geography research

Geographers have the potential to significantly contribute to debates within the three arenas of modes of incorporation of ethnic groups, ethnic conflict and dynamics of inequality, but have largely neglected to do so (Jackson; 1987). Mainly, this is due to the fragmentation of human geography and the fact that the majority of academics are White (Pulido, 2002). Consequently, the study of ethnicity has become isolated and the study

of environmental racism specifically has been ignored. Nevertheless, there have been individuals who have made an impact, particularly in urban and social geography (*ibid*).

Modes of incorporation i.e. the ways in which marginal ethnic minorities are incorporated into mainstream society, has been the arena where geographers have been prominent, focusing on the extent to which assimilation is possible, desirable or even valid in society and how space and place can be manipulated to encourage or discourage assimilation (Jackson, 1987; Ogden, 1995; Peach, 1996; Johnston *et al.*, 2002; Johnston *et al.*, 2007). This strand overlaps and offers a solution to the issue of ethnic conflict which occurs when two or more groups have differing interests and, by definition, only arises in ethnically plural societies (Johnston, 1995; Esman, 2004). As place, pattern and process are central to both geography and ethnic conflict it is unsurprising this is a key study area, although Johnston is critical of studies which isolate conflict without understanding their spatial and temporal contexts (*ibid*). Most recently, ethnic conflict has exhibited itself in the geography of uneven development, the rise and fall of superpowers and geographies of inequality, as those groups who are privileged are motivated to ensure that subordinate groups remain as such (Squires and Kubrin, 2005). The most significant areas of geography research currently in the UK are concerned with the dynamics of inequality. Geography's imperialistic trajectory and occasional entanglement have been discussed previously and was a key focus until the 1930s when both the empire and work on ethnicity in geography went into decline (Pulido, 2002; Bonnett, 2008)<sup>49</sup>. There has been a resurgence since the 1960s which saw the first wave of immigration to the UK from the Caribbean and southern Asia and the inclusion of a question regarding ethnicity on the 1961 census for the first time (Bonnett, 1997). Typically, the focus of this recent literature has been development and social policy which has been dominated by the work of Dorling (2005; 2011; 2012) and Dorling *et al.* (2008).

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<sup>49</sup> Rather than taking this decline as an opportunity to deal with the discipline's imperialist past head on, Bonnett (2003) suggests that geographers avoided it. Instead, from the 1960s, they attempted to erase negative connotations by over-compensating for these past mistakes; they engaged in radical and anti-racist geographies. Within school geography, these anti-racist sentiments largely manifested themselves in textbooks which consciously chose images to 'dismantle ethnic prejudice and expose students to human diversity' (Bonnett, 2008: 24). However, Bonnett (2008) explains that this resulted in a confused relativist and universalist narrative; on one hand suggesting that differences should be respected and, on the other, suggesting that we are all the same.

This review of the geographical literature provided insight into how ethnicity is defined within the discipline. It highlighted particularly the 'Whiteness' of the subject and its imperialistic origins but also the sociological nature of much of the contemporary research. The focus on the dynamics of inequality is interesting given the stimulus of this research and the national uptake of geography by students of different ethnicities described in Section 1.2. However, much of the geography research described here focuses on defining inequality and then devising social policy to reduce it; the grouping of ethnic minorities is important. My research, in contrast, acknowledges inequality and groups students as a starting point, however, the focus is on exploring and understanding their individual experiences.

### 3.7 Conclusion

Setting this research against this background of literature is important given the specific context of Claytons. Indeed, when presenting the first iteration of this work at an EdD conference it took time for delegates to understand that the ethnic minority students in my study were not of low-ability nor of low socio-economic status; understandable given the pervading themes in the educational literature along the lines of ethnic under-achievement and the closing of this gap. Coupled with this, given that most studies in education are bounded in schools and locales with proportions of ethnic minority students much larger and more socially and academically diverse than Claytons, there appears to be an opportunity here to add a different, and arguably more positive voice to the existing literature. Indeed, it shines a light on ethnic minority students who would not otherwise be captured in ethnicity focused education research.

This is particularly important given that the discourses which dominated Claytons during the time I was carrying out my research. Staff strongly believed that cultural and parental influence were the drivers of subject choice; they were surprised that I would choose to research something that appeared so obvious and which was out of the control of

teachers. At best, I think this view misses the point and at worst is dangerous as it assumes a simplistic and homogenous narrative of 25% of the school population and comes from a predominantly White, adult, male perspective. My approach to the issue of ethnicity, which is centred around social constructivism and which views student discourse through the lens of intersectionality, not only shapes my methodological decisions but also allows the students to speak for themselves in an arena where they otherwise would not be heard.

## Chapter 4

### A discussion of two key papers which focus on student views of school subjects from ethnic minority perspectives

#### 4.1 Introduction

This chapter critically reviews two examples from the literature that currently exists regarding student views of subjects from an ethnic minority perspective. The introduction sets the scene by describing the place of student-focused research in geography education research. While there is limited literature within this field, the paper by Bar-Gal and Sofer (2010) who work within an Israeli context, is an example which is firstly discussed (Section 4.2). I then consider the work of Hawkey and Prior (2011) working within the context of ethnic minority perspectives on school history in the UK (Section 4.3), as this was a key stimulus for this research.

Despite an acceptance by interpretivist researchers that children and young people<sup>50</sup> construct and see the world differently to adults, both physiologically and experientially, and the fact that children are central participants within the arena of education, the voice of the child has only been foregrounded in research in the last decade and has mainly resided in a geographical rather than an educational context (Holloway and Valentine, 2000; Punch 2002; Catling, 2005; Barratt Hacking *et al.*, 2005; Hopkins, 2010). Lord and Jones (2006) in their review of students' experiences regarding the National Curriculum and assessment, found a lack of student focused research in geography compared to other subjects, particularly the core of English, maths and science in the UK; while Williams (1999) reported similar gaps internationally. Research on children which has been undertaken in geography education has either ignored general perspectives of

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<sup>50</sup> The definition and use of the terms 'children' and 'young people' is discussed in Section 1.4 in the context of this research.

geography, with most studies focusing on specific aspects such as the environment, or been reduced to tallies of key words (Rickinson, 1999; Rutherford, 2002; Hopwood, 2007). This reflects difficulties in geography education research more generally which, according to Lambert (2010) has stalled, leaving the subject vulnerable and lost in the noise of endless curriculum innovation and change. He argues there is a need to engage with challenging, cutting-edge work and includes the productive engagement of students with subjects as a critical area for consideration. Set in this context, gaps have started to be filled, notably by projects such as Young People's Geography and Listening to Children<sup>51</sup> and by small-scale research (Dowgill, 1998; Biddulph and Adey 2003, 2004; Norman and Harrison, 2004; Hopwood, 2004; Hopwood *et al.*, 2005; Hopwood 2007, 2009, 2012; Kitchen, 2011; 2013a; 2013b). However, there remain unanswered questions and unheard voices, particularly regarding students from an ethnic minority background, despite Weeden (2006) suggesting this as a potentially rich and important vein of research.

#### 4.2 Israeli students' perceptions of geography instruction goals; B. Bar-Gal and S. Sofer (2010)

Israel, which became the world's only Jewish-majority state following its independence in 1948, is characterised by on-going conflict with Palestine and a diverse culture which is a direct result of Jews from around the world migrating to their spiritual home bringing cultural and religious traditions with them. B. Bar-Gal and S. Sofer lecture at Gordon Academic College of Education, a teacher training institution which describes itself as 'a true microcosm of multi-cultural Haifa', Israel's third largest city (Gordon College, 2013). In their 2010 paper published in the journal 'International Research in Geographical and

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<sup>51</sup> Listening to Children (L2C) was a 12 month geography education project which engaged in researching the relationship between students' local community experience and the curriculum experienced in schools. The research was a small-scale study focusing on 11 – 13 year olds in one South Gloucestershire school and was funded by the UK Economic and Social Research Council (ESRC). Some key outcomes for the project were an enhanced understanding of the local environment and increased research skills used to disseminate findings. For further information see [www.peecworks.org/PEEC/PEEC\\_Research/S0179A9C8-0179AA0A](http://www.peecworks.org/PEEC/PEEC_Research/S0179A9C8-0179AA0A)



Environmental Education' (IRGEE), they identify that education is a multilevel process and they define three levels of operation – the curriculum (which in Israel as in the UK is nationally defined), the teachers delivering the curriculum and the students experiencing the curriculum. Rooted within this context their research has two aims, firstly to understand students' perceptions of the importance of learning geography given the context of nationally defined curriculum objectives and secondly, to see whether there is a difference in perception between Arab and Israeli students.

The methods used in the initial stages of the research were qualitative, with 500 eighth and ninth graders (aged 14 – 16) being interviewed by a team of geography graduates and asked a range of open questions such as, 'What is the importance of geography?' and 'According to your opinion, what is the purpose of teaching the subject?'. As a result of content analyses on the transcripts, the authors categorised<sup>52</sup> the 17 most common responses into four areas; those of general knowledge, skills, values and knowledge of geographical principles. Similar research into perceptions of geography has, with the exception of the final grouping, resulted in identical categorisations (Hopwood, 2004; 2009; 2012). The most commonly mentioned aspects were knowledge of geographical principles (6 out of 17 statements) which included statements of social or environmental conscience and the influence of geographical causes on politics and the ethical goals of the curriculum (5 out of 17 statements) which included love of the homeland and respect for others. The topic of globalisation and skills relating to critical thinking and problem solving were not mentioned.

In the second stage of the research the 17 statements were included in a questionnaire and 280 students (151 Arab and 129 Jewish) from 20 different classes who responded were asked about the extent to which they agreed with each statement (a score of 4 meaning 'to a great extent' while a score of 1 meant 'not at all')<sup>53</sup>. Generally, Bar-Gal and

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<sup>52</sup> In the article the authors do not make explicit how they went about categorising the responses so it is unclear how the categories were determined and whether the process was inductive or deductive.

<sup>53</sup> It is unclear from the article whether the students in phase 2 were a sub-set of the students who took part in phase 1 or whether these were different students from different schools.

Sofer found students agreed more with statements referring to general knowledge and knowledge of geographical principles as opposed to those relating to skills and values. In addition, they found a significant<sup>54</sup> difference between the perceptions of Arabs, one third of whom perceived environmental issues to be the most important feature of geographical education, and Israelis who did not consider environmental issues to be at all important but instead perceived issues relating geography to political conflicts and determining borders as central. There were some similarities in the perceptions of both ethnic groups, for example, approximately one third of respondents from both ethnic groups thought there was a significant relationship between geography and the economy. Both groups also agreed when suggesting the issues which were least relevant to geography, although they rated these statements differently. These included geography's role in the developing of tolerance and the development of national and social values.

Bar-Gal and Sofer conclude that there is a significant gap between the Israeli curriculum goals and student perceptions, which they suggest may be a result of students being unaware of the goals and more focused on learning factual content and the didactic way in which geography is taught to students. They also highlight differences between similar studies (albeit with very different student populations and no discernible ethnic minorities) in the UK and Hungary in which students did perceive skills to be central to geography (Uto-Visi, 2001; Hopwood, 2004; 2009). Most relevant to my research are the differences in perception between ethnic groups. The authors suggest that this could be a result of cultural and societal differences or different emphases on the curriculum by Arab and Jewish teachers. They suggest that, as the minority group, Arab teachers may find political issues challenging to identify with and therefore to teach, which consequently has an influence on their students' perceptions.

While the authors are relatively clear in their claims and overall argument, the limitations of the data and degree to which conclusions can be generalised are not explicit. Also, while there is a brief identification of counter-evidence in different national contexts there

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<sup>54</sup> While Bar-Gal and Sofer use descriptive statistics – frequency, mean and standard deviation – to describe their data, they do not use inferential statistics to determine whether or not the data was statistically significant. The term 'significant' is theirs which they use to describe the difference in perceptions between Arabs and Jews.

is not an holistic appreciation of the range of studies regarding the perceptions of geography by students. To a certain extent, and particularly regarding the differences in perception of ethnic groups, the authors can be forgiven as there is a lack of literature covering these issues specifically. However, a more rigorous discussion of arguments by Dowgill (1998), Biddulph and Adey (2003; 2004), Lam and Lai (2003), Norman and Harrison (2004), Hopwood *et al.* (2005) and Al Nofli (2010), would have been beneficial.

In terms of the balance between theory and practice, Bar-Gal and Sofer are not explicit about either their methodology or their theoretical orientation beyond a simplistic statement that the first stage of their research was 'qualitative' and the second stage required 'statistical analysis'. Nor do they highlight how their findings will have an impact on practice other than to suggest that it is the frontal<sup>55</sup> method of teaching which leads to a lack of affinity between geography and skills and values. Therefore, while I find their findings interesting, applicable in parts to my context and certainly worthy of further study, I feel their research falls between a theoretical and a practical stool subsequently lacking robustness.

#### 4.3 History, memory cultures and meaning in the classroom; K. Hawkey and J. Prior (2011)

The second article, that of Hawkey and Prior (2011), acted as a stimulus for my research as it investigates the perceptions of school history by ethnic minority students, attempts to explain how experiences and relationships with people at home and in the community can shape these perspectives and how teachers in the classroom can navigate conflicting pressures.

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<sup>55</sup> The authors refer to 'frontal' teaching which is where 'the teacher stands before the class and presents the material students are to learn' (Luther, 2000: 59). It is the same as 'lecturing' which is the term used in Higher Education.

Kate Hawkey and Jayne Prior both work at the Graduate School of Education at the University of Bristol; Hawkey as a Senior Lecturer in history education and Prior as a Senior Teaching Fellow and PGCE director of educational and professional studies. Between 1<sup>st</sup> September 2007 and 1<sup>st</sup> January 2009 they collaborated on a study, funded by the British Academy, into different ethnic perspectives on British history in 3 case study schools based in Bristol and Birmingham<sup>56</sup>. This article, in the 'Journal of Curriculum Studies' was produced as a result.

The authors clearly set out both their methodology (classroom ethnography) and methods (interviews with history subject team leaders, creation of images as a stimulus for semi-structured interviews with students and observations) to create a narrative of history from the perspective of 15 students from 3 different schools. The students, both boys and girls, were of African British, African, Asian and White British heritage and were seen as rich, individual case studies; the authors illustrating their findings with representative examples from the data.

Analysis of the data was structured in a number of ways. Firstly, the authors used hypotheses derived from Epstein (2007) – that family has a greater impact than school on ethnic minority perceptions of history and that ethnic minority students see the national narrative as a story of exclusion and White privilege - to test their data. The researchers also worked independently to code the transcripts with codes relating to race / ethnicity, nation and family / community. Finally, they drafted their findings and discussed these with the three history subject leaders which enabled them to refine and clarify the detail.

Hawkey and Prior found similarities in the history curricula taught at the three schools and evidence of a clear national story; a relic of the prescriptive early National Curriculum and the commitment of resources to its teaching. However, there was more variation in local

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<sup>56</sup> It is interesting to note the locations of the case studies which are inherently urban and with high % of ethnic minority populations (16% of Bristol (Bristol City Council, 2013) and 47% in Birmingham (Birmingham City Council, 2013)) which is in contrast to the county in which I work which is 'significantly rural' and which has an ethnic minority % of 11% in line with the national average (Office for National Statistics, 2012). Therefore, while Claytons is more ethnically diverse than 60% of schools nationally, this comes as a shock to those who equate the rural environment to that of White and middle class (RAISEonline, 2013).

history and also different approaches to the teaching of similar topics. In addition, the varying aims and perspectives of the subject leaders seemed to influence the students' experiences; the degree to which this was a factor was affected by the subject leaders' experience and time in the school.

In all three schools, students could recall historical characters and events but had little sense of an overall narrative which linked these together. The characters were two-dimensional and pigeonholed as either 'heroes' or 'villains', although there was little evidence that the students' ethnic background or experiences affected their choices. However, the students' 'heroes' were those who had suffered injustice and were at the forefront of the struggle for civil rights; although this was explicitly highlighted by only two students.

Hawkey and Prior also found that the 'history' which students were exposed to at home and within their local communities was different, and sometimes contradictory to that which was studied in school. Students tended to accept the version of history which came through informal settings which, at its most extreme, created mistrust of the teacher. 'Hyphenation' of student identity (Carrington and Short, 1998), where children regard themselves as a mixture of the country they live in and the country their parents or grandparents came from, was common although its extent varied both between and within individuals, and while there were differences in perceptions within ethnic groups it was the teenage identity which appeared to be uppermost throughout their discourses. The authors highlight an approach which encourages a constructivist epistemology with greater history from home being desirable but also warns teachers that these perspectives can be entrenched and forewarned is forearmed in the dealing of them.

The context of Hawkey and Prior's work is clearly situated. They highlight their work within a national context; where a recently revised History National Curriculum was socially and culturally placed alongside discussions around British citizenship and notions of national identity. They also describe the school, department and student contexts effectively. The schools are all mixed state schools and located in inner city areas in

England, although they differ in ethnic and socio-economic composition. The history departments all had reputations 'known to be good' (2011: 233) and information about the school, gender, ethnicity and pseudonym is given for each of the 15 case study students. While the authors explain that there is little research into adolescent's historical perspectives in England, they outline international research – particularly in the US, Northern Ireland and Canada – which they describe as being 'very focused' (2011: 232). This detailed contextualisation at different scales is helpful. As an outsider to the field of history education it allows me to follow the research process and interpret its outcomes more effectively. It also makes clear how this small-scale, in-depth research builds on existing knowledge in the field.

Hawkey and Prior are also clear about their methods and the implications of their findings for both practice and research; aspects which I found deficient in the article by Bar-Gal and Sofer. The purpose and process of each method is outlined and supported by images and appendices which provide additional detail about the curriculum and interview tasks and questions. However, in the same way that Bar-Gal and Sofer describe their methodology as 'qualitative', Hawkey and Prior are similarly brief in their description of their methodology as 'ethnography'. While I do think that Hawkey and Prior's work is more robust and explicitly articulated than that of Bar-Gal and Sofer, I also suspect that my own research interests and knowledge fill in some of the gaps. I am more familiar with the English curriculum than the Israeli one and the methods and theoretical perspective of Hawkey and Prior accord with my own. Therefore, gaps in my understanding proved a stumbling block in my reading of the article by Bar-Gal and Sofer; there were many details missing and my critique is possibly more critical as a result.

Despite this, there are some aspects of Hawkey and Prior's article which could be made clearer. For example, despite being a key term and one used in the title of the article, memory cultures are not defined. The authors state that the article 'contributes to wider discourses of...how teachers in classrooms can navigate the tensions between history and memory cultures' (2011: 231), yet, without a clear understanding of the terminology it is difficult to verify these claims.

## 4.4 Conclusion

While I am not particularly sympathetic to the methodology employed by Bar-Gal and Sofer (2010) I acknowledge that theirs is both an interesting and useful starting point for engaging with notions of geographical knowledge and ethnicity. Indeed, in Chapter 10 I reconsider their work in light of my findings to enable a deeper and more detailed critique of their work and also to better illuminate my own.

I used the article by Hawkey and Prior (2011) primarily as a methodological stimulus. The methods employed and the discussion of ethnicity as one facet of a hybrid identity resonated both with my constructivist epistemologies and intersectional lens. The scale of the research is also similar and reassured me that multiple in-depth case studies are manageable and can provide rich data in a similar context.

## Chapter 5

# A discussion of the factors affecting students' subject choice at GCSE and A level

### 5.1 Introduction

The first significant point of course choice in England and Wales is when students choose subjects to study for their General Certificate of Secondary Education (GCSE) exams. While this point is usually at age 14 and during Year 9, some schools who have adopted a three year Key Stage 4 model ask students to make these choices at age 13 and during Year 8<sup>57</sup>. In contrast to many other countries, schools in England and Wales do not generally offer a choice between academic and vocational pathways but offer some element of choice between subjects (Stables, 1996). However, this choice is constrained by government – who stipulate that all students must study English, maths and science at GCSE level – and individual schools who occasionally make other subjects, such as Religious Studies or Personal, Social and Health education compulsory. Additionally, and to ensure that students have access to a broad and balanced curriculum, students must be offered at least one course within the arts, design and technology, modern foreign languages and humanities (it is within this last grouping that geography sits, usually with subjects including history and Religious Studies).

These many and varied constraints and influences on student subject choice at GCSE level can be summarised and categorised (Figure 5.1). Here, Weeden (2007) has identified a framework for choice which takes into account whole school variables, departmental variables and the students themselves. The influence of external factors at a variety of scales – national, regional and local – are also included to illustrate the

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<sup>57</sup> Biddulph suggests that this practice of adopting a two year Key Stage 3 - often to ensure that students have the best chance of achieving a good grade at GCSE - means that many who do not choose the subject 'lose access to opportunities to engage with the ideas, approaches and perspectives we associate with geographical study' (2017: 46)



complexity of this process. This thesis is mainly concerned with the student (the area of Figure 5.1 ringed in red) and therefore this chapter focuses on the literature surrounding the factors close to the student which influence their GCSE choice, both generally (Section 5.2) and in the context of geography (Section 5.3). The whole school and departmental variables are discussed with specific reference to Claytons in the introduction to Chapter 12 and many of the external factors, at least in relation to their position regarding geographical knowledge, are mentioned in Chapter 2. However, given that McCrone *et al.* (2005) identify a paucity of research into structural factors which influence student choice, I think it useful to pause here to briefly consider the English Baccalaureate (EBacc)<sup>58</sup> as a significant external factor.

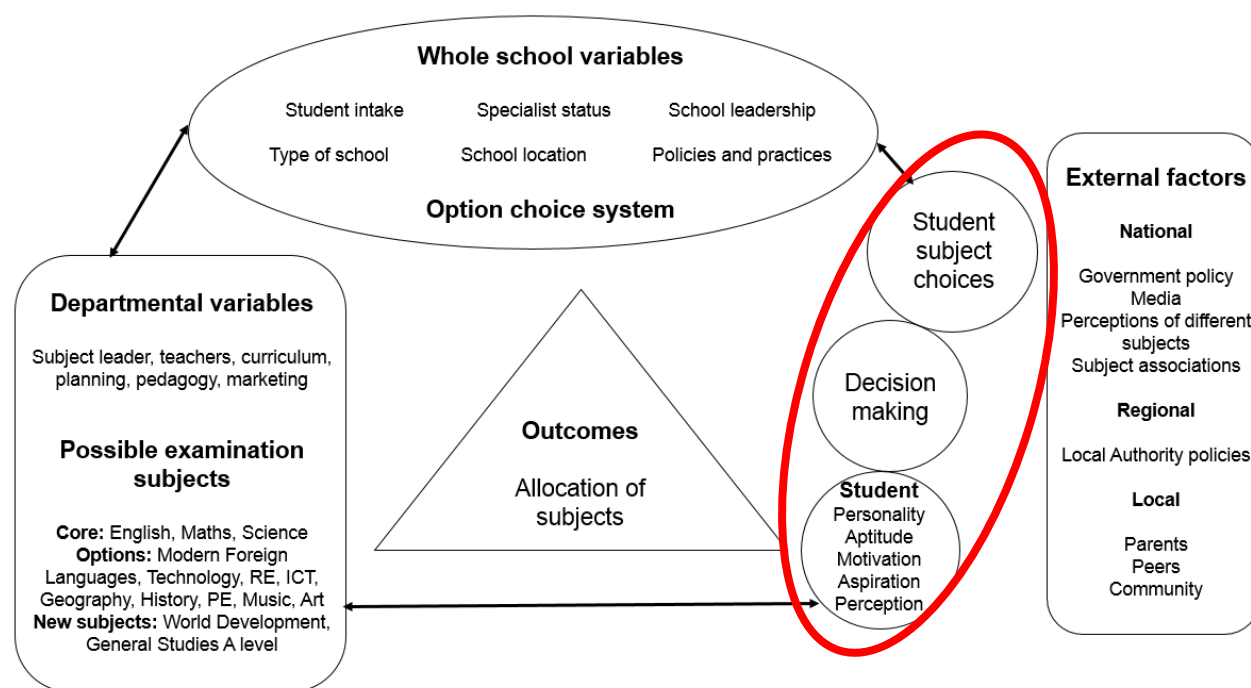


Figure 5.1 The factors which constrain and influence student subject choice at GCSE (After: Weeden, 2007).

<sup>58</sup> The English Baccalaureate (EBacc) was introduced in 2010 as a performance measure for schools. It was introduced because the number of non-academic qualifications had risen dramatically from 15,000 in 2004 to about 575,000 in 2010 with a disproportionate number of vocational qualifications being taken by students from deprived backgrounds. The measure calculates the proportion of students who achieve at least a C grade in the core academic subjects of English, maths, history or geography, the sciences and a language. In 2015, 23.9% of students in state funded schools achieved the EBacc (Department for Education, 2015a; Department for Education, 2016c).

The introduction of the EBacc in 2010 as a performance measure for schools has been a significant political development with the potential to affect subject choice at GCSE. However, because it is still in its relative infancy its effects are not well captured within the body of literature discussed throughout this chapter which, due to the lack of recent research, draws mainly on studies from the 1990s and early 2000s. Studies which do exist show little effect on the overall uptake of EBacc subjects (Greevy *et al.*, 2013)<sup>59</sup>. It is therefore probably fair to say that the impact of the EBacc, to date, on the uptake of subjects which are included, such as geography, and in schools that are selective, such as Claytons, has been minimal. However, revised government policy and the way in which schools react to this may shift the framework in which students make their subject choices in the future and ensure that more students learn geography up to GCSE (Biddulph, 2017).

The second significant point of course choice comes following the GCSE exams at age 16 when students are in Year 11. A variety of pathways are open to students post-16 including vocational courses such as BTECs<sup>60</sup>, apprenticeships and A levels. The proportion of students opting for each pathway varies on a local scale and is linked to rates of deprivation with fewer students taking A levels in more deprived areas. However,

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<sup>59</sup> Greevy *et al.* (2013) surveyed 618 teachers across a representative sample of English secondary schools and then carried out face-to-face interviews and discussion groups within nine case study schools. They found that the performance measure had little effect on the overall uptake of EBacc subjects; 46% of students took subjects which made them eligible for the EBacc in 2011 compared to 48% in 2012. However, those schools with high numbers of students on free school meals (FSM) tended to have lower proportions of students meeting the EBacc criteria than either selective schools or those which had low numbers of FSM students (41%, 82% and 58% respectively). Where schools did not give students the opportunity to study the whole range of EBacc subjects this was usually because high-ability students were targeted and low-ability students, who it was felt would struggle with the academic demands, were discouraged.

<sup>60</sup> Vocational qualifications, such as the BTEC, are assessed at the same level as A levels (level 3) and can also be studied in conjunction with A levels; it is not uncommon for a BTEC to be studied alongside 1 or 2 A level subjects. They relate to a broad employment area such as business, engineering, IT or social care. While the uptake of these qualifications varies, HEFCE (2015) suggests that approximately 17% of students took BTEC qualifications in 2012 / 2013 while a further 16% took a combination of BTEC and A levels.

nationally in 2015, 41% of students in this age group opted to take A level exams<sup>61</sup> (New Schools Network, 2016).

While the average number of GCSE subjects taken per student is 10, the average number of subjects taken at AS<sup>62</sup> level and then continued on to A level is four and three respectively (Paton, 2013; BBC, 2015). These subjects are often selected from those that students have studied at GCSE and wish to continue, however many schools also allow students to pick up new subjects which they may not have previously studied. The external government constraints evident at GCSE do not apply here, there are no subjects that are compulsory and instead it is more likely to be school structures such as option blocking or policies relating to small class sizes<sup>63</sup> which may constrict student choice. Therefore, while translating Figure 5.1 directly from GCSE to A level is perhaps unwise, the underlying framework is useful. Having said this, an external factor which is clearly missing from the GCSE version but which arguably drives choice to an extent at A level (particularly in highly academic schools such as Claytons) is the influence and entry requirements of the university sector and, in particular, the Russell Group of universities<sup>64</sup>.

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<sup>61</sup> This chapter will focus almost exclusively on A levels given that this is the only pathway which is offered at Claytons. Every year around 98% of Year 11 students choose to continue their education at the school's sixth form. The remaining 2% tend to transfer to other local schools where a broader variety of pathways and vocational courses are offered.

<sup>62</sup> From the advent of curriculum 2000 until the recent A level reforms (first teaching September 2016) AS levels were either stand-alone qualifications or taken as the first part of the A level course. Students typically would choose four subjects to study in Year 12 at AS level and then drop one of these subjects to continue 3 A levels into Year 13. The recent reforms have 'uncoupled' AS levels from A levels so that they are now exclusively stand-alone qualifications and while around half of schools are continuing to offer AS level qualifications it is unclear whether this proportion will be maintained in the future (UCAS, 2015).

<sup>63</sup> Option blocking involves particular subjects being grouped together so that a student can only select one subject from each block. Its main purpose is to facilitate timetabling although it can also be used as a device to ensure students access a broad and balanced curriculum. Schools often stipulate minimum class sizes; if only a few students choose a particular subject it may not run as it is not cost effective.

<sup>64</sup> The Russell Group (established in 1994) is a collection of 24 universities from across the United Kingdom including institutions such as Bristol, Cambridge, Oxford, Sheffield and Warwick. While initially the group was convened to represent its members' interests to parliament it has also identified eight facilitating subjects which are frequently required for admission into degree courses and which therefore leave open a wide range of options for university study. The group recommends that students take at least two of these eight subjects – biology, chemistry, English literature, geography, history, modern and classical languages, physics and maths and further maths – for A level, particularly if students are unsure what they wish to study at university (Russell Group, 2016).

Having set out the broad external framework in which students choose their GCSE and A level options, this chapter focuses upon the different factors at play, both generally (Sections 5.2 and 5.4) and referring to geography specifically (Sections 5.3 and 5.5). The focus of this thesis is on the choices that are made by ethnic minority students, however, there is minimal literature available which discusses this, particularly in a UK context. Studies that do exist tend to use large, quantitative data sets taken from student exam entries and returns to the school census (Vidal Roderio, 2009) rather than focusing on rich, detailed descriptions of individual students. However, given Clayton's context as a selective, all girls' school, the lens of intersectionality which I have argued for in Chapter 3 and the direction in which much of the literature on subject choice is skewed, I have chosen throughout to address the influence of gender, socioeconomic status and type of school, in the choosing of GCSE and A levels.

## 5.2 The factors affecting subject choice at GCSE level

Previous studies of students' choices at GCSE have identified five key factors that influence their decisions. Three of these factors are what McCrone *et al.* (2005) describe as 'individual attributes', factors which help an individual to make their own choice – enjoyment, perceived usefulness and perceived ability – while the remaining two 'structural factors' relate to advice given by others which influence student choice – specifically parents' and teachers' advice. However, while most studies are agreed on these being the main factors there is less agreement regarding their relative weighting and their interplay.

In her study of 1779 students in the early 1980s, Kelly (1988) identified that individual attributes appeared more important than structural factors and within these over-arching categorisations, perceived usefulness was most important, followed by enjoyment and perceived ability (Table 5.1). Structural factors were seen to matter a little while other factors, such as the opinions of peers, barely mattered.

The data shows little difference between genders; the only question with more than 0.1 difference in mean score is the question regarding difficulty which the author speculates may be a result of girls being less confident in their abilities. Kelly also inspected the data according to social class and ability, although as with gender, few differences were observed between these groups. Students of lower ability or from working class backgrounds stressed the usefulness of subjects for careers less and the advice of teachers and parents more. However, these variations were slight within a constant pattern which for all groups placed perceived usefulness, enjoyment and perceived ability highest, parent and teacher advice in the middle and other factors, such as gender composition, the opinions of peers and the identity of the teacher lowest.

*Table 5.1 Girls' and boys' opinions about what influences their GCSE subject choice (After: Kelly, 1988).*

When you are choosing a subject, does it matter...	Mean score		Standiff	N
	Boys	Girls		
...if it is useful for getting a job? ( <i>perceived usefulness</i> )	2.9	2.9	5	1375
...if it is interesting? ( <i>enjoyment</i> )	2.7	2.8	-6	1376
...if you are good at it? ( <i>perceived ability</i> )	2.7	2.8	-9	1367
...what they say at careers talks? ( <i>teacher advice</i> )	2.3	2.3	-3	1365
...what your parents say about it? ( <i>parent advice</i> )	2.1	2.2	-4	1369
...if the teacher says you should take it? ( <i>teacher advice</i> )	2.1	2.2	-10	1366
...what it says in the options booklet? ( <i>teacher advice</i> )	2.1	2.1	-2	1368
...if it is difficult? ( <i>perceived ability</i> )	1.9	2.1	-27	1368
...who will be teaching it? ( <i>other</i> )	1.7	1.6	6	1373
...what older pupils at the school say about it? ( <i>other</i> )	1.5	1.5	0	1366
...if it's mainly girls or boys taking it? ( <i>other</i> )	1.5	1.4	20	1368
...what your friends are taking? ( <i>other</i> )	1.4	1.3	11	1371

Score: 3 – matters a lot to me; 2 – matters a little to me; 1 – doesn't matter to me at all

\*\*\* significant beyond the 0.1% level

\* significant beyond the 5% level

McCrone *et al.* (2005) in their review of 59 studies focused on student choices at KS3, had findings that mirrored those of Kelly (1988). Specifically, they found that students mainly chose subjects at GCSE because of their individual attributes. They further identified that students considered a subject's intrinsic value – usually described in terms of their enjoyment – yet, they also considered the extrinsic value and particularly its usefulness for future careers. When students felt a subject did not hold intrinsic worth some still opted for it based on its extrinsic value. However, if both intrinsic and extrinsic worth were absent, then the student was unlikely to choose to study the subject at GCSE level. Students' perceived ability was also an important factor in their decision making; they tended to opt for those subjects in which they felt they had ability. However, these perceptions were often affected by structural factors such as setting or teaching style. The influence of parents and teachers was also seen as important although often to a lesser extent than those individual attributes identified. The contribution of careers education, home background and the influence of the teacher was typically divided. These were all seen as being an influence, in some studies an important influence, however, the extent to which they were important and why was less clear. For example, the literature was unclear whether students were influenced by teachers that they liked and respected, by those that they deemed to be good at teaching or by those who had a successful record with GCSE classes. Similarly, the authors found it difficult to distinguish between a student's liking of the subject and their liking of the teacher and their pedagogy, a feature which is consistent with other subject specific studies (see Section 5.3)

This influence of external factors and specifically parent and teacher influence on subject choice is an area which has been under-researched, particularly in contemporary settings. In the studies which describe the weight given to each, students appear to consider parental advice as more important, perhaps because teacher advice was delivered more subtly and over a period of time (Reid *et al.*, 1974; Ryrie *et al.*, 1979; Bardell, 1982; Adey and Biddulph, 2001).

Many studies focused on gender differences and how the different factors played out in different subjects for boys and girls. While Kelly (1988) is keen to point out that whether

a subject is dominated by boys or girls is not a particularly important factor in students' decision making, several studies have attempted to investigate the gendering of subjects. Despite the fact that Equal Opportunities legislation in 1975 formally removed the gendering of subjects<sup>65</sup>, there is evidence that stereotypes remain. For example, Pratt *et al.* (1984), Stables and Stables (1995), Stables and Wikeley (1997), Bell (2001) and Colley and Coomber (2003) all suggest that girls are more likely to opt for subjects with a heavy language demand, such as history and modern foreign languages, whereas boys are more likely to choose subjects which are quantitative, such as the sciences and maths. Whether these differences are due to heavily ingrained and persistent societal views of gender or specific gender personality traits is unclear (Stables, 1996). However, it is interesting to note the positioning of geography according to gender. In some studies, notably Stables and Stables (1995), Hendley *et al.* (1996), Kelly (1988) and Davies *et al.* (2008) the subject is seen as masculine. In others, there is little gender difference; boys and girls like and dislike the subject fairly equally (Stables and Wikely, 1997). While Colley and Comber (2003) found that geography is feminine in both Year 7 and Year 11 and more so with the older year group. These variations could be a result of school ethos or systematic bias within the school system. Another possible explanation is that these studies do not compare like with like; some ask students directly for their subject preferences while others investigate exam entries.

Coupled with gender, a second factor which appears to influence subject preferences is whether the school is co-educational or single-sex. Stables (1990) suggests less polarisation towards gender stereotypes in single-sex schools, a finding supported by Lawrie and Brown (1992) albeit with slightly older students who were making their A level rather than their GCSE choices. However, while the Year 7 students in Colley *et al.* (1994) also support this pattern, they found that the results from the Year 11 students in

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<sup>65</sup> Prior to the Equal Opportunities Act (1975) syllabuses and subject content typically excluded the experiences of girls and women (Northam, 1982; Stanworth, 1981; Chisholm & Holland, 1987). In addition, students tended to be directed into conventionally male and female subjects and careers. Generally, girls' careers were believed less important than boys' and many young women had limited occupational aspirations. They tended to choose low status and poorly paid 'feminine' jobs that bridged the gap between leaving school and getting married (Arnot and Weiner, 1987).

their study do not show this effect. They suggest two reasons for this. Firstly, the gender intensification hypothesis, where the process of adopting an adult role may override the effect of school type in the older students, and secondly, they suggest that the younger students may not have developed a full awareness of gender stereotyping in the absence of the other sex. Not all studies have supported these findings however, as Francis *et al.* (2003) found no effects of attending a co-educational or single-sex school on gender preferences towards subjects and instead there was a blurring of traditional gender boundaries in both types of school.

There has been less focus on the link between socio-economic background and subject choice however, a quantitative analysis of Yellis data suggests this is an important factor; in some instances (girls rather than boys) and some subjects (history and Business Studies) more important than gender (Davies *et al.*, 2008). A clear relationship between parental occupation, attainment and choice is also identified by Pring *et al.* (2009) who, in addition to suggesting that attainment is predictable based on gender, socio-economic background and ethnicity, suggest that parents with high status occupations are more likely to have offspring who follow an academic route from GCSE to A levels to university.

There are several aspects of this review of the literature which have informed my study. Firstly, I use the terminology of 'individual attributes' and 'structural factors' suggested by McCrone *et al.* (2005) to describe the factors affecting student choice and as a framework in Section 5.3 and Chapter 12. Secondly, while the positioning of geography according to gender is contested, most studies, including the most recent, suggest that the subject is seen as masculine. This accords with notions of geography fieldwork which is typically seen as masculine but also White and able-bodied (Bracken and Mawdsley, 2004). However, the literature also suggests that there is less polarisation towards gender stereotypes in single-sex schools. These ideas inform the discussion of my findings regarding the stories of the students in Chapter 11 and subject choice in Chapter 12. Finally, the literature reviewed in this section has made me more cognisant of some aspects of my context which I have taken for granted but which need to be clearly signposted for the reader. For example, the vast majority of students at Claytons take



the academic route from GCSE to A levels to university; it was also the route which I took as a student. It is very easy to assume this as a common experience, yet, Pring *et al.* (2009) remind us that while this may be the case here, it may not be widespread in other socio-economic contexts.

### 5.3 The factors affecting the choice of geography at GCSE level

Before exploring the individual attributes affecting the choice of geography at GCSE level it is important to highlight, as Weeden (2011b) does, that national patterns of uptake vary according to attainment, type of school and geographical location. This is because to understand the processes which shape subject choice, one first has to understand the context in which they are made. The stimulus for Weeden's research was rapidly declining entries for GCSE geography – down 35.6% between 1996 and 2010 – and while the trend has reversed since then, his findings remain relevant (see Section 1.5). In summary, these were firstly, that as attainment increased so the uptake of geography increased and that gender was less important than overall attainment; both genders in the highest attaining decile were more likely to study geography. Secondly, geography entries in the most deprived areas were much lower than those in the least deprived areas and thirdly that entries were consistently higher in selective and independent schools and lower in comprehensive and secondary modern schools. As a high-attaining, selective school with an intake which is among the least deprived, it is perhaps unsurprising that the uptake of geography GCSE at Claytons is high<sup>66</sup>. However, as Weeden concedes, recognising these patterns in uptake do not explain why individual students are more or less likely to study the subject.

In order to begin to understand the factors which influence individual students' choice in the context of geography we need to turn to small-scale research carried out by teachers

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<sup>66</sup> Nationally, an average 31% of the cohort took geography at GCSE in 2015 a figure which has remained relatively consistent in recent years. The corresponding figure at Claytons was 50%.

(Stott *et al.*, 1997; Niven, 2012) as well as larger-scale researcher-driven studies (Adey and Biddulph, 2001; Biddulph and Adey, 2003; Weeden 2007; Weeden, 2011a) to gain a more detailed and textured picture. We also need to understand the stimulus and nature of these studies to consider how they sit with this thesis. Most of these studies were driven by a desire to explain declines in GCSE geography entries either at a national or school scale. Indeed, Weeden (2007) was written as a result of research commissioned by the Royal Geographical Society in preparation for an Action Plan for geography bid<sup>67</sup> and found that the GCSE options process was a unique experience which was based on a combination of abilities, interests, motivations, life experiences and interactions with the school that was individual to each student. The same individual attributes and structural factors that were identified in Section 5.2 are dominant in the geography literature and are dealt with in this thesis. However, it is worth noting that the relative weighting of these factors is contested in geography as it is more generally. So, while in this section I consider enjoyment first followed by usefulness and ability as individual attributes and then the teacher followed by parental influence as structural factors, this does not mean that those that come first are necessarily more important.

#### Individual attributes: enjoyment

Enjoyment of geography as a subject can be considered in both individual and situational terms. Trend (2005) suggests that individual interest in the subject is that which students bring to new learning experiences, while situational interest includes those significant experiences which stimulate students to engage with subject content. It is possible that the teacher can, at least partially, influence both these types of interest in positive and negative ways<sup>68</sup>. It is worth highlighting at this juncture that ‘enjoyment’ is used by Trend as an over-arching term to capture both enjoyment, interest and response to teacher

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<sup>67</sup> The Action Plan for Geography was led jointly by the Royal Geographical Society and the Geographical Association between 2006 and 2011. Funding of £3.8 million was awarded by the Department for Education to the Action Plan in order to directly tackle the decline in entries at GCSE and A level (Geographical Association, 2011).

<sup>68</sup> My use of critical incident charting as a research method (Chapter 8) is an attempt to explore these situational experiences in more depth.

pedagogy and other authors have noted the difficulty of separating these strands (Adey and Biddulph, 2001; Biddulph and Adey, 2003; Norman and Harrison, 2004). These studies suggest that students who were interested in the subject content being studied were unlikely to lose interest regardless of whether they found the activity boring. However, if a student was either disinterested in the content or came to the topic with little or no prior knowledge then the learning activity held more sway.

While Weeden (2011a) suggests that overall, geography is generally enjoyed by students, other studies, most notably by Hopwood (2004, 2012), suggest that some topics are inherently more interesting and enjoyable than others. These tend to be those where students can make direct links with their own experiences or those which present content which is new to the student (Biddulph and Adey, 2003). In addition, topics which have a strong physical geography bias, such as weather, tend to be particularly disliked (Norman and Harrison, 2004). Biddulph and Adey (2003) suggest this may be due to the technical terminology which needs to be learnt and the abstract nature of some concepts, both of which detract from students' enjoyment. Skills such as mapwork divided students, being among both the most liked and most disliked topics in Norman and Harrison's study (2004). However, despite both studies focusing on the opinions of KS3 students, Biddulph and Adey (2003) found instead that practical applications of the subject which manifested themselves in fieldwork, mapwork and atlas work were those which were most enjoyed.

In terms of the different pedagogical techniques which were employed by teachers, most of the literature is agreed that students favour variety, approaches which challenge them and those which enable them to be engaged rather than passive (Kitchen, 2011; 2013a; 2013b). Students also enjoy being out of the classroom and engaging with geography in the real world, something which may explain the focus on mapwork and fieldwork in Biddulph and Adey's study (2003). Creative activities, such as writing newspaper reports, creating posters and doing presentations are also seen as enjoyable, while answering questions from textbooks, making notes and extended writing are among the activities least enjoyed (Adey and Biddulph, 2001; Biddulph and Adey, 2003; Kitchen, 2011).

However, attempting to extricate enjoyment from ability is less straightforward. Lightbody *et al.* (1996: 21) suggests that if students enjoy a subject then they are more motivated to work hard which they subsequently believe makes them 'do well'. Stott *et al.* (1997) also found that high-ability students were more likely to find geography interesting than low-ability students. Coupled with this, interest was the most important reason for high-ability students to choose the subject at GCSE level while it was second behind parental advice, for low-ability students.

#### Individual attributes: perceived usefulness

While the link between perceived usefulness and potential careers has been explored generally (see Section 5.2) there is less evidence as to how this plays out in geography specifically. Stables and Wikeley (1997) found that usefulness was the most dominant criteria, with greater weighting than enjoyment when students were assessing the importance of subjects. In this study, geography was ranked fourth out of 14 subjects – behind maths, English and science – as being the most useful subject by both boys and girls. More recent and geography specific studies have also suggested that students perceive the subject to be useful for potential future careers but are less able to explicitly define what 'usefulness' means in this context and why they think it is useful (Adey and Biddulph, 2001; Hopwood, 2004; Norman and Harrison, 2004). Niven's (2012) study found that students perceived geography would be useful for a narrow range of careers which were dominated by tourism and teaching but which also included weather presenter, scientist and geologist. While Adey and Biddulph (2001) and Hopwood (2004, 2012) focused specifically on the transferrable skills which geography could equip students with. The former study described the usefulness of mapskills within careers in the travel industry, while students in the latter study explained that geography allowed them to listen to different viewpoints and to have an opinion on global issues, although they found it challenging to tie these skills in with specific careers.

### Individual attributes: perceived ability

As has already been noted, there may be a link between enjoyment and ability and both of these appear to be important in students' decision making at GCSE level. However, while students tend to be explicit about their enjoyment of subjects, expressions of ability tend to be implicit. This may be because students feel uncomfortable about declaring their ability in a subject or may not have a concrete idea about their ability. However, it also may be because they have clear ideas about a subject's difficulty and have decided that some subjects are only for able students (Adey and Biddulph, 2001). This potential explanation is, at least in part, supported by Stott *et al.* (1997) who found that results achieved to date and subject difficulty were the second and third placed reasons behind interest, for high-ability students. However, those students who were considered of low-ability in geography did not consider either of these factors to be particularly important; they ranked behind most others and on a par with the influence of friends.

Several studies have suggested that students perceive GCSE geography to be a demanding subject involving large amounts of reading and writing (Adey and Biddulph, 2001; Biddulph and Adey, 2003; Niven, 2012). This has implications for those students with poor literacy skills and may begin to explain reactions to the coursework element of the subject (typically worth around 25% of the final grade) which, in these studies, were found to be mixed. Some students and teachers regarded coursework as a positive aspect while others were more sceptical. However, it is worth bearing in mind that these studies do not distinguish between what is being assessed – fieldwork – and how – through extended writing (Biddulph and Adey, 2003). Another aspect which students found challenging was the increased emphasis on geographical issues and on giving and supporting their own opinion which they saw as a significant difference between their KS3 and GCSE studies (Biddulph and Adey, 2003). However, when compared more objectively to other subjects, geography appears to fall in the middle ground for difficulty; easier than physics, chemistry, biology and modern foreign languages, similar to English and maths and harder than media studies, design and technology and sport (Coe, 2008).

## 5.4 The factors affecting subject choice at A level

There is limited research in the area of option choice at A level with most studies focusing on younger pupils and GCSE choices (Stables and Stables, 1995). Where research does exist it tends to focus on gender disparities and particularly on subjects where these are prevalent e.g. maths and science. For example, Straker (1989) concluded that the uptake of maths at A level was dependent upon uptake of associated subjects, particularly physics and chemistry. These associated subjects were seen as being too difficult and rigorous for most students and also male dominated.

However, while the field of literature is small it raises a number of interesting points. In a continuation of their earlier research into younger students' option choices, Stables and Stables (1995) found that English was the most popular choice of A level for both sexes. After this, and in a mirroring of their earlier findings, girls' choice of subjects were dominated by those with a heavy language demand while boys leaned towards the quantitative. The most significant difference lay behind the reasons given for choosing these subjects. Both sexes overwhelmingly agreed that their subjects had been chosen with careers or further education in mind; enjoyment and ability were less important than they had been at GCSE level. This is at least partly supported by Whitehead (1984, 1994) who suggests girls are more likely to be extrinsically motivated by careers and further education than boys who combine these to a greater or lesser extent with intrinsic motivations such as enjoyment.

## 5.5 The factors affecting the choice of geography at A level

While there are a number of studies which investigate the factors affecting the choice of geography at GCSE level, comparable studies at A level are virtually non-existent. Indeed, while several general and over-arching studies do refer to geography as one subject among many (see Section 5.4) there is only one study in the recent literature

which has geography as its main focus. Perhaps this is because in the system of school league tables it is GCSE results rather than those at A level which drive placings or because geography entries at A level were, at least until the mid-2000s, relatively buoyant. Nevertheless, Ferretti's (2007) study, situated in a large comprehensive in the north of England and stimulated by a more recent decline in AS and A level entries<sup>69</sup> is interesting, particularly in light of similar studies at GCSE level (see Section 5.3).

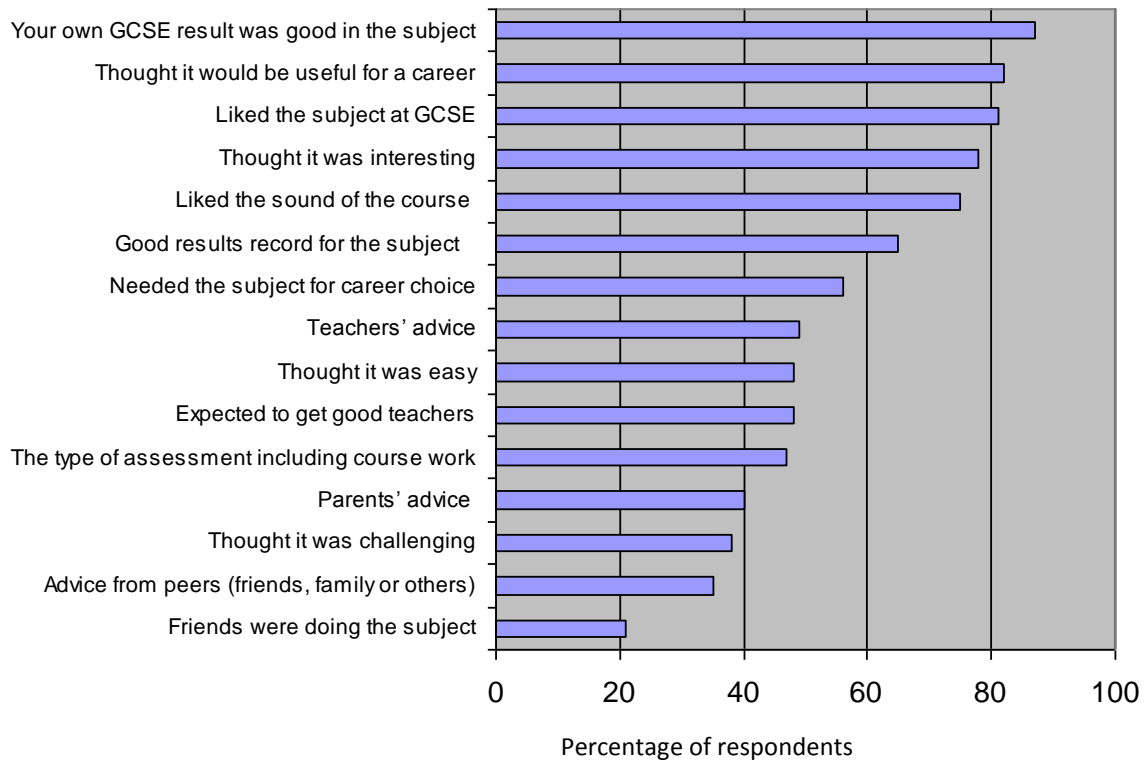
The study found that the most important factors affecting the choice of geography at A level were whether their own GCSE results were good (ability), whether they liked the subject at GCSE (enjoyment), whether it was useful for a career (usefulness) and whether it was interesting. Factors which were not important included whether or not friends had chosen the subject, advice from peers and whether they thought it would be challenging (Figure 5.2) (Ferretti, 2007: 141).

When taking gender into account, ability, enjoyment and usefulness were identified by both boys and girls as being important although the relative importance of each was different. Girls thought that their result at GCSE was the most important (ability), followed by usefulness and enjoyment, while boys were more likely to choose A level geography if they found it enjoyable and interesting; usefulness and ability were also important but to a lesser extent.

These findings complement those discussed in Section 5.3 in that the individual attributes of ability, usefulness and enjoyment remain the most significant factors for students in their choice of geography. However, in the same way that studies at GCSE are divided about the relative weightings of these, so this study at A level illustrates that boys and girls consider different aspects to be important.

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<sup>69</sup> The number of A level entries declined from 42,786 in 1996 to 32,522 in 2006, a trend which prompted Ferretti to research the factors affecting students' choice of Geography at A level. These figures had recovered somewhat by 2016 when 54,866 students were entered for AS level and 36,363 students for A level (Ferretti, 2007).



*Figure 5.2 The factors affecting student choice of geography at A level (After: Ferretti, 2007).*

A particularly interesting finding of this study is the difference in perception of teachers compared to their students. Teachers had very strong views about both coursework and fieldwork; they felt coursework at GCSE put students off taking the subject at A level, while conversely they felt fieldwork was important and encouraged students into further study. The stories of the students were markedly different. They did not have particularly strong views about either topic and accepted that coursework was part of the assessment process. They were also less enthusiastic about fieldwork; it did not particularly influence them either way into either taking or not taking their geographical studies further.



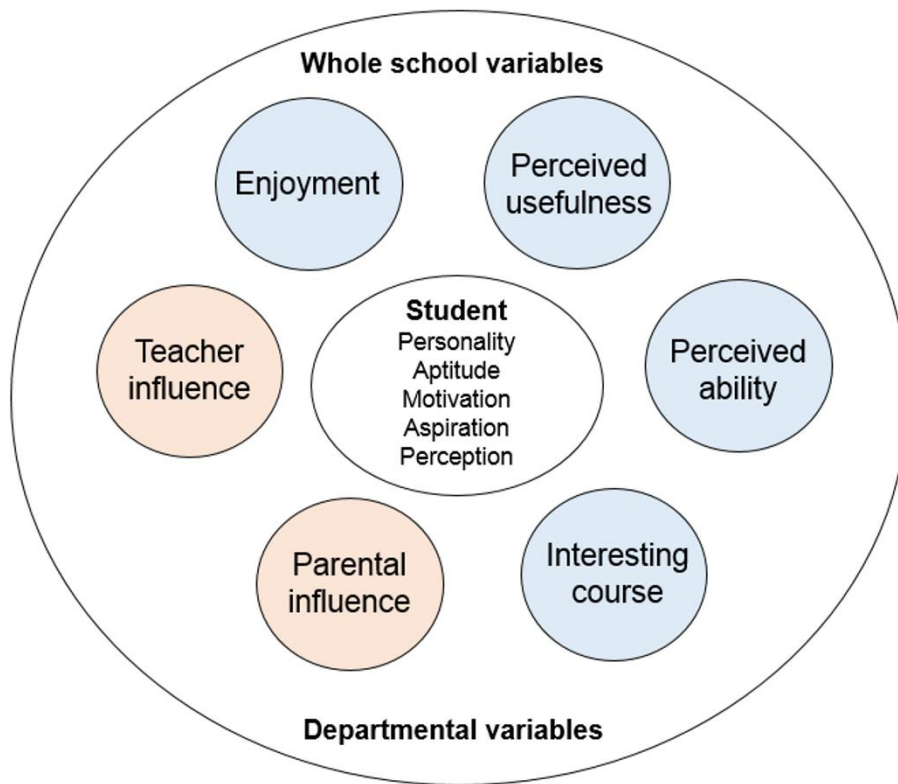
## 5.6 Conclusion

The literature discussed in this chapter paints a complex picture of subject choice in English secondary schools. This is little wonder given the various aims and methodologies of the studies and the diversity of both schools and the individuals making these decisions. Attempting to draw generalisations is therefore challenging. However, the key themes that emerge from studies in geography are that, at GCSE level, the individual attributes of enjoyment, ability and usefulness seem important in students' decision making, while at A level, student ability and the focus on careers and further education are paramount (Adey and Biddulph, 2001; Biddulph and Adey, 2003; Ferretti, 2007). I find this, combined with and set in the wider context of Figure 5.1, a useful theoretical starting point for deductive interview analysis (see Chapter 8) and structuring findings (see Chapter 12). I have termed this 'subject choice theory' and summarised this in Figure 5.3<sup>70</sup>. This illustrates the individual attributes (blue) and structural factors (orange) which have bearing on students' subject choice<sup>71</sup>.

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<sup>70</sup> The naming of this theory as 'subject choice theory' is slightly problematic given that it is driven by the geography education literature rather than generic studies into subject choice at GCSE and A level. However, the factors outlined in both these areas are fundamentally the same. The main differences appear when factors are ranked and are evident when comparisons are made between general studies as well as those focused on geography. While Chapter 12 describes student decision making at GCSE and A level more generally, I am essentially interested in why students have, or have not, chosen to take geography. This is why subject choice theory has its foundation in the geography education, rather than general education, literature.

<sup>71</sup> Circles have been chosen here as they have the potential to overlap. For example, in the literature it is difficult to extricate ability from enjoyment and arguably these circles could therefore have been drawn so that they link together.



*Figure 5.3 Subject choice theory (After: Adey and Biddulph, 2001; Biddulph and Adey, 2003; Ferretti, 2007)*

Additionally, there are two interesting methodological points to draw from this exploration of the literature which highlight why this study is so important. Firstly, while there are some exceptions, the majority of studies discussed in this chapter employ quantitative techniques enabling the ranking of factors relative to each other. This research is unable to do this as the interviews with students probe deeply but do not explicitly ask them to consider the relative weighting of factors. While I could have incorporated this as part of the interview I chose not to. A method of weighting imposed by me would restrict the students' answers, stripping out the richness of their stories and potentially missing factors which were important to them but not covered in the literature. Equally, it was likely that a method of weighting suggested by the students would be inconsistent between them and not easily comparable. The previous literature also struggles to move beyond

the identification of key factors whereas this in-depth, qualitative approach provides rich and contextualised description; it is a strength rather than a deficiency. Secondly, previous studies almost exclusively deal with only Key Stage at a time. This research is different because it takes the long view, asking students to articulate how they made decisions at both GCSE and A level. This *ex post* position provides an opportunity to consider the importance of these factors to individuals at different stages.

## Conclusion to Part I

In the introduction to this part, I used the analogy of a lesson to explain my approach to the literature. Rather than presenting a complete review of 'what is known', I wanted this to be an exploration of the key concepts of geographical knowledge, ethnicity and subject choice. An engagement with these literatures would enable the reader to understand my lesson; this thesis. Like many good lessons I take the opportunity here to draw out the main points and theories to take forward into the rest of the thesis. The main overarching theory – the lens through which I view the students' identities – is intersectionality (see Chapter 3). This enables a multi-faceted view of both the students and the data and allows for a consideration of how parts of their identity intersect and interact. Three smaller theories have also been mobilised permeating my methodological decisions in Part II and providing a framework to structure my findings in Part III. Perspective categorisation theory (see Chapters 2 and 7) drives my categorisation of student representations during both the first and second stages of research. It provides a structure for analysis and discussion in Chapter 10, where I also provide a critique and extension to the initial theorising of Walford (1996) and Catling (2004). Perspective influence theory (see Chapter 2) is also mobilised to support the consideration of the different influences on student representations of geographical knowledge. It again provides coherence to a chapter which focuses on stories and therefore has the potential to lack focus. However, the extent to which it is useful beyond this and in the context of this study is discussed (see Chapter 11). Finally, subject choice theory (see Chapter 5) is used as a stimulus for discussion around the stories that link with GCSE and A level option choices (see Chapter 12). Again, I provide a critique and modification of this in the light of both my findings and those of the students as researchers.

I also suggested in the introduction to this part that 'professional doctorate candidates start from what is not known' Bourner *et al.* (2001: 72), but also indicated that this notion may be problematic. This is because while the critical incident which triggers the research may be identifiable – it certainly was in my case – it should be viewed within the context of a longer professional and research journey. I have engaged with the literature at

different points of this journey, for different reasons and in different ways. It is therefore important for the reader to understand that this part marks a waypoint; my engagement with the literature is an ongoing process which does not stop with the completion of this thesis (see Chapter 13 and Appendix 13.i)

PART II

OUTLINING THE RESEARCH APPROACH

## Introduction to Part II

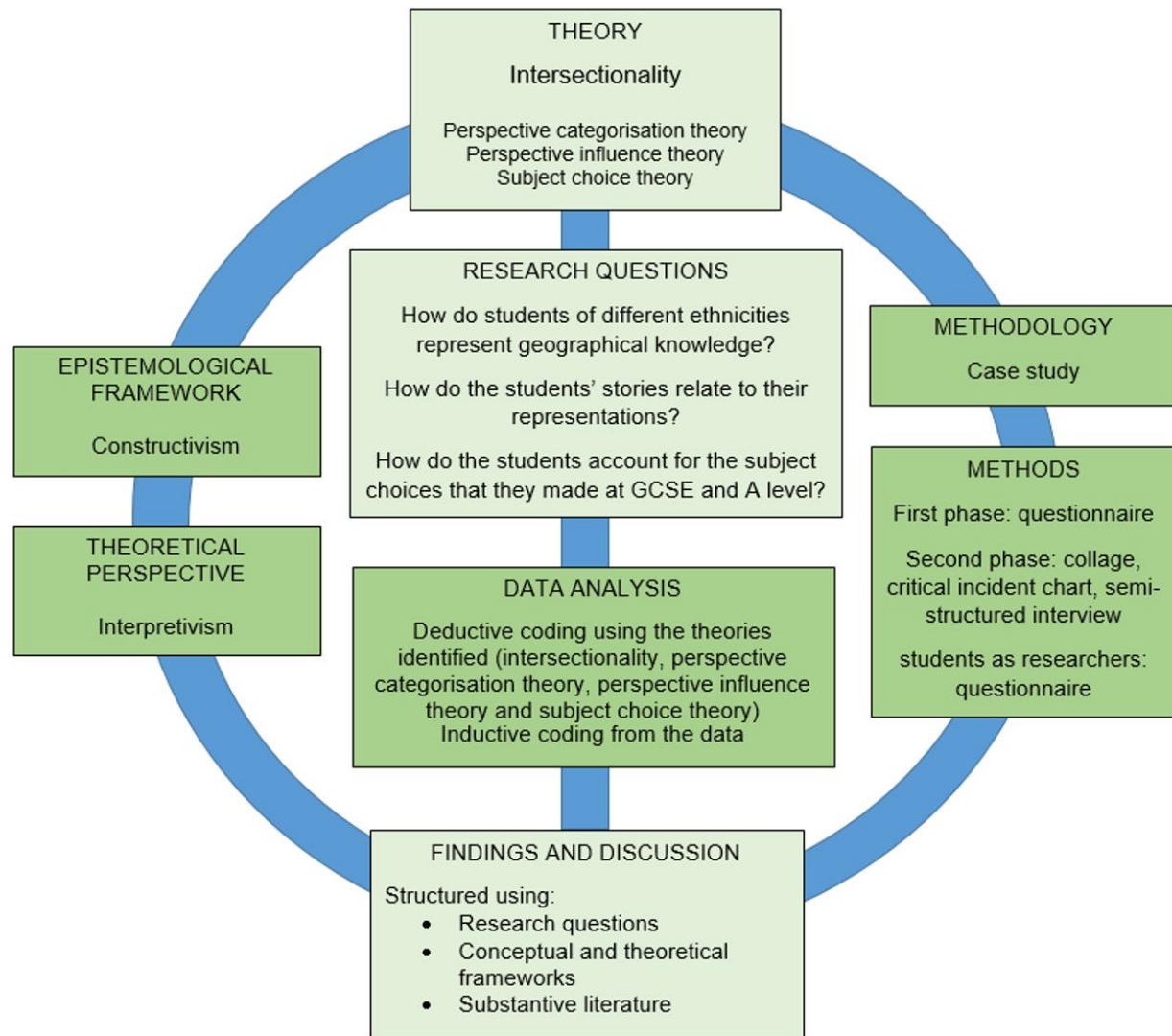
The international declaration on research in geography education (IGU-CGE, 2015) has useful things to say about how research within the field should be conducted. However, in an introduction to a part which articulates and justifies my research plans, it is the declaration's appendix detailing methodological concerns which I highlight.

Firstly, it explains that educational research is firmly rooted within the social sciences research tradition, although due to the diverse paradigmatic nature of geography itself it recognises that a range of methodologies within the field of geography education research may be appropriate. Regardless of the approach, which may involve large samples or small-scale case studies, it explains that it is vital the research is trustworthy and insightful. Secondly, it states that while there are a broad range of methodologies to select from, these should be carefully chosen to reflect the aims, questions and context of the investigation. Finally, it concludes that all research should meet the highest ethical standards as defined by national and institutional research requirements.

Taking these three points into account, the four chapters contained within this part seek to explore, justify and evaluate the methodologies and methods employed to uncover my theoretical perspective and epistemology (Crotty, 1998). They also discuss a range of ethical concerns to make my thinking transparent. Crucially, taken together, they enable the reader to make sense of the findings and discussion detailed in Part III. However, while they are written and will be read in a linear fashion the process was both iterative and multi-strand (see Figure ii.1).

Chapter 6 highlights the research questions introduced in Chapter 1 and outlines the research approach from epistemology to theoretical approach to methodology for the main phase of empirical research. It concludes with a discussion of ethical considerations and issues of power. The methods, reflections from the pilot study and strategies of analysis are discussed in the three succeeding chapters. Chapter 7 discusses the first phase of research in which questionnaires were employed to select the eight case study students who would be involved in the second phase, while Chapter 8 discusses this second phase of research in depth. Running parallel to both of these researcher-led

phases was research carried out by students as researchers (SaRs). A justification of this strategy, a summary of their training to demonstrate readiness for research and a discussion of their methods of both data collection and analysis is discussed in Chapter 9.



*Figure ii.1 The golden thread – Part II: Outlining the research approach*



## Chapter 6

# Exploring and justifying the research approach, ethical dilemmas and issues of power

### 6.1 Introduction

The questions driving this research have already been outlined in Chapter 1, however it is useful here to reiterate them and identify how they are linked to the methodological concerns of this chapter. To do this I draw on the work of Pryor and Ampiah (2004), Dunne *et al.* (2005) and Pryor (2010) who identify six issues – epistemological, ontological, practical, micropolitical, macropolitical and ethical – which constitute the methodology of a research project (Figure 6.1). If nothing else, this diagram provides a checklist of issues to be addressed in any exploration and justification of methodology; each are tackled throughout this chapter and the ones that follow. However, considering research questions within this framework is also useful as while they guide the methodology, so they themselves are guided by the position of the researcher.

In addition, Pryor argues that considering research questions within methodology can act as a barometer as to whether the questions are good ones or not. He suggests that ‘ultimately, a good research question is one that works in the interest of the research’ and so tying the issues, methodology and research questions together makes it more likely that these will be effective (2010: 165).

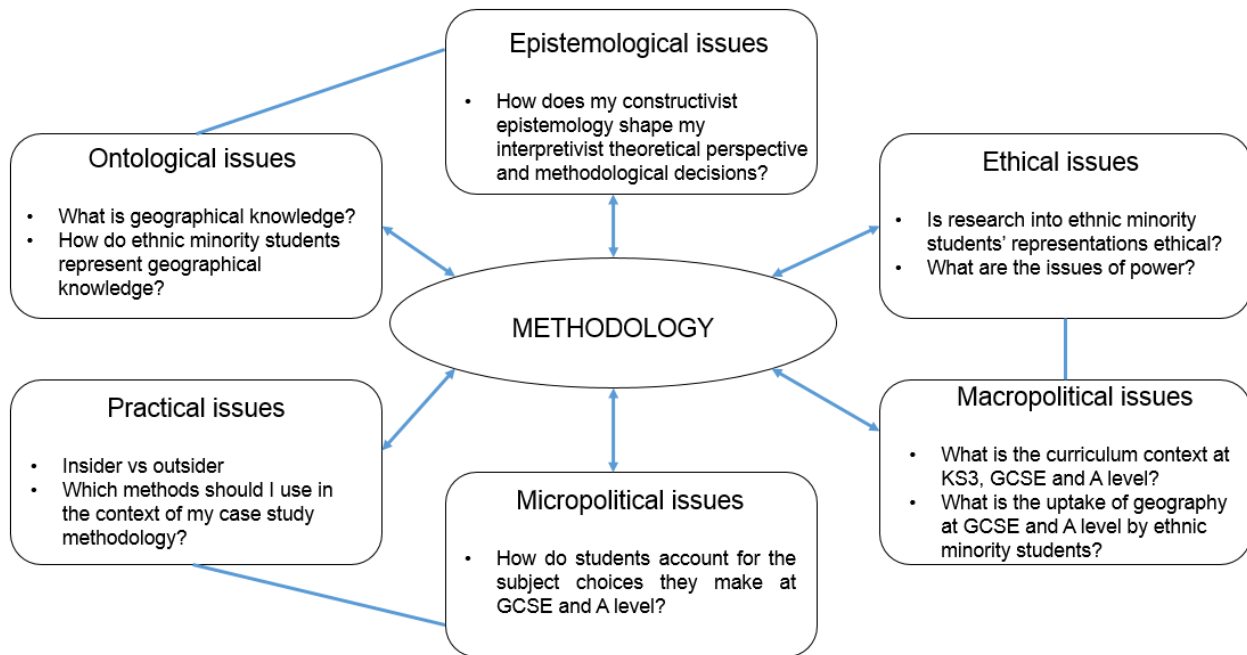


Figure 6.1 A methodological framework (After: Pryor, 2010)<sup>72</sup>.

The research questions which underpin this research are:

- How do students of different ethnicities represent geographical knowledge?
- How do the students' stories relate to their representations?
- How do the students account for the subject choices that they made at GCSE and A level?

However, while this was the final iteration of the questions they were refined and altered during the process of research. Perhaps the greatest shift in my thinking was around the definition of perceptions, conceptions and representations discussed in Section 1.5. Initially, the first two research questions focused on student perceptions; 'What do students of different ethnicities perceive to be geographical knowledge?' and 'How do the students' stories relate to their perceptions?'. However, I struggled with the practicalities of 'getting inside the students' minds' which a focus on perceptions suggests (Roberts,

<sup>72</sup> The arrows in the diagram show that each of the issues have a bearing on the methodology. However, some of the issues are also joined by a line; they are paired. This is because it is difficult, for example, to state one's political views without some reference to an ethical framework. Similarly, a particular epistemology requires an ontological premise and micropolitical and practical issues require a consideration of the local context (Pryor, 2010).

2009a: 187). Also, while theoretically I was able to distinguish between perceptions and conceptions, the overlaps between the two terms made this very difficult to do practically. Shifting the focus to physical representations made interpretation more straightforward; the collages were tangible and became a focus of discussion during the interviews. Originally, the third research question – ‘How do students account for the option choices that they make?’ - was unspecific and the use of the present tense and ‘students’ rather than ‘the students (in this research)’ suggested generalisability. This was subsequently refined so that the question was specifically focused on choices at GCSE and A level and the word ‘option’ was changed to ‘subject’ to make it clear that the process of choice was framed around subjects.

The following sections attempt to link these refined research questions to methodology and the issues outlined in Figure 6.1. Section 6.2 outlines the research approach focusing in turn on epistemological and ontological issues, theoretical perspectives and methodology, while Section 6.3 begins to highlight the research methods (the practical issues surrounding these are explored and justified in more depth in Chapters 7 and 8). Finally, Sections 6.4 and 6.5 deal with ethical issues, particularly focusing on three dilemmas which I faced during the research process, and issues of power.

## 6.2 The research approach

There is a vast and complex range of methods and methodologies from which to select, and while much of the literature is agreed that these should be drawn out of a consideration of my epistemology and theoretical perspectives (Thomas, 2009; Crotty, 1998), others suggest that it is unhelpful to claim an inflexible theoretical perspective. Instead, they believe that the research questions should drive the methods, particularly in pragmatic, multiple method studies (Onwuegbuzie and Leech, 2006; Ridenour and Newman, 2008). As the intention here is to use qualitative methods I initially adopt the former position (Table 6.1) - explaining my positioning within this section and Section 6.3

- and subsequently use the research sub-questions to check the robustness and appropriateness of the selected methods (Table 6.5). The research approach has been selected to ensure theoretical, investigator and between-method triangulation of the data (Flick, 2004) (see Section 6.5 for further discussion). This is important, not so much as a validation strategy nor as an approach to generalisation, but more as a route to additional knowledge, particularly as Hopwood (2004, 2009) argues in favour of research approaches that accommodate the ‘fluid, contextual, fragmented and even outright inconsistent’ nature of student representations (Abd-El-Khalick, 2004; 16).

*Table 6.1 The relationship between epistemology, theoretical perspectives, methodology and research methods (After: Crotty, 1998: 5)<sup>73</sup>*

<b>Epistemology</b>	<b>Theoretical perspective</b>	<b>Methodology</b>	<b>Methods</b>
Objectivism	Positivism	Experimental research	Sampling
Constructionism	Interpretivism	Survey research	Measurement
Subjectivism	Symbolic interactionism	Ethnography	Questionnaire
	Phenomenology	Grounded theory	Observation
	Hermeneutics	Heuristic inquiry	Interview
	Critical inquiry	Action research	Focus group
	Feminism	Discourse analysis	Life history
	Postmodernism etc.	Feminist standpoint research	Narrative
		Case study <sup>74</sup> etc.	Visual methods
			Critical incident tracing
			Statistical analysis
			Comparative analysis
			Cognitive mapping
			Interpretive method etc.

<sup>73</sup> The position of this research at each stage is highlighted.

<sup>74</sup> Crotty (1998: 5) categorises case study as a method rather than a methodology and indeed, there is much discussion within the literature as to how it should be categorised (Hyett *et al.*, 2014). This is partly because some researchers use the terms method and methodology interchangeably and do not pay enough attention to either epistemology or theoretical perspective (Carter and Little, 2007; Sandelowski, 2010). However, because this research is consistent with the traditional case study approach described by Stake (1995) and Bassey (1999) and is methodologically and theoretically situated, I have defined case study as a methodology rather than a method.

### 6.3 Epistemology and ontology

As highlighted in Chapter 2, I adopt a constructivist epistemology, where meaning is constructed not discovered and is shaped by our interactions with the world (Gray, 2004; Crotty, 1998). It is based upon engagement between subject and object in making meaning, as opposed to objectivism where meaning exists independently in the object, or subjectivism where meaning is purely imposed by the subject on the object (Crotty, 1998). Ontology – ‘the study of being’ (Crotty, 1998: 10) – does not feature in Table 6.1. This is because epistemology and ontology emerge together and are difficult to separate conceptually. Crotty (1998: 12) therefore sees little point in intentionally complicating the four stages outlined in Table 6.1 and discussed within this chapter. However, there remain a series of ontological dilemmas which are challenging to reconcile.

While a constructivist epistemology is often aligned with a relativist ontology, Crotty (1998: 63) is clear that it can, at once, be both relativist *and* realist. For example, I am comfortable with the notion that different people interpret the same event or phenomenon in different ways, but equally, I would not dispute the objective existence of that event or phenomenon. This ontological perspective crucially shapes the way in which I view my research. In particular, I heed the advice of Richardson (1997) who argues that it is important that style and voice comes through clearly in the presentation of data. The descriptions and images which appear in this thesis are not simply one student’s reflection of ‘what is there’, but instead, as the students tell their stories, they do so through the voice(s) of their culture.

Coupled with this, young people are the focus of this research, they have their own cultures and are experts in their own understandings of geography. Therefore, it is impossible for an adult such as myself to know what it is like to be a young person in the world today because only they themselves can know this (Tisdall *et al.*, 2010). To begin to resolve this concern this thesis contains two research strands. Running parallel to my strand of research is research led by students as researchers (SaRs) who have investigated factors affecting students’ GCSE choices from a student perspective and

from their own epistemological stance (which may not be constructivist)(see Chapter 9). While the SaRs have designed, collected and analysed their own data and this has been incorporated without revision, ultimately I have written this thesis making authorial and editorial decisions along the way and have also provided additional commentary. So, while I have attempted to mitigate this it is impossible to get completely away from an adult interpretation (Kellett, 2005a)(see Chapter 12).

## 6.4 Theoretical perspective

Interpretivism seeks an in-depth understanding of meaning within a context. It recognises that reality is complex due to the fact that human behaviour is unique, fluid, dynamic and shaped by context, meaning that it is impossible to generalise and reduce data to a universal theory. Additionally, interpretivist researchers highlight multiple perspectives and believe that there is a need to examine phenomena from the perspective of the participant in their 'natural state' rather than through the eyes of the researcher (Cohen *et al.*, 2000; Crotty, 1998).

While the term 'interpretivism' is rarely used in academic geography, the discipline has been engaged with this theoretical approach for several decades; certainly since the 1970s with humanistic geography, and more specifically since the cultural turn of the 1980s, where there has been a push for non-positivist, qualitative research (Clifford and Valentine, 2010; Rawding, 2013). However, while interpretivism within educational research emerged around the same time (in the late 1970s) it has been more limited and developed more slowly (Gerber, 1996).

The theoretical perspective adopted must be driven by the research and not because I am rooted in a particular paradigm. However, interpretivism is consistent with my epistemology and ontology and also suitable for the topic of research and research questions (Lancy, 1993; Morrison, 2007; Thomas, 2009). It is useful in the context of this

research because it seeks to understand different and individual social constructions rather than emancipate a particular group or change a specific system. However, this does not mean that issues of social justice are ignored, rather that the researcher must put them in context (see Conclusion to Part III). In addition, an interpretivist theoretical perspective ‘engages teachers as reflective practitioners in developing enhanced understanding...by constantly asking questions such as: Who are these students who sit before me? Who is the self that teaches?’ (Taylor and Medina, 2013: 5). As a practitioner-researcher, this type of deep reflection is essential; it serves both to make this thesis more robust and develops my understanding so that I can be more effective in my day-to-day role (see Part III).

## 6.5 Methodology

Given this epistemological, ontological and theoretical perspective, the methodology subsequently needs to be determined. Fundamentally, as the research questions frame this research as in-depth, aiming to trace relationships between student experiences and their representations of geographical knowledge, and undertaken in a complex environment (a school), case study is an appropriate strategy.

Case study has a number of strengths which are relevant to this research. It allows flexibility in terms of research methods and acknowledges the subtlety and complexity of students’ views (Blaxter *et al.*, 2002). In addition, it tends to be more easily understood by a wide audience as the participants are allowed to speak for themselves, which is important if this research is to resonate with other practitioners (Nisbet and Watt, 1984). However, as a methodology it is not without its critics and it is important here to be specific and explicit about some of the characteristics of this research so that its rigour and quality may be assessed (Cohen *et al.*, 2000). This section serves to provide a definition of case study and of the particular case in this research. It then moves on to discuss issues of reliability, validity and generalisability. Throughout, the work of Yin (2009), Bassey (1999)

and Stake (1995) is referred to as these authors provide different perspectives which I use to situate and justify my decisions.

## Defining case study

Cohen *et al.* (2000: 181) define a case study as ‘a specific instance that is frequently designed to illustrate a more general principle...It provides a unique example of real people in real situations enabling readers to understand ideas more clearly than simply by presenting them with abstract theories or principles’. It is the focus on a single thing, looked at in depth and from various angles to look at relationships and processes (Stake, 2005; Simons, 2009; Thomas, 2016). However, case study, as Taylor (2016: 582) notes, can be classified into different types according to its aims. It is therefore worth reflecting on how this research fits within the classification described in Table 6.2.

*Table 6.2 Types of case study defined by Yin (2009), Bassey (1999) and Stake (1995) (After: Taylor, 2016: 582)*

Yin (2009: 178)	Bassey (1999: 62 – 64)	Stake (1995: 3 – 4)
<p><b>Explanatory</b> – understanding how or why something came to be</p> <p><b>Descriptive</b> – describing a phenomenon within its context</p> <p><b>Exploratory</b> – considering what questions could be helpfully asked in a particular case or what procedures could be used</p>	<p><b>Theory seeking / theory testing</b> – case is expected to be somehow typical of something more general</p> <p><b>Story-telling / picture-drawing</b> – analytical accounts of cases designed to illuminate theory</p> <p><b>Evaluative</b> – in-depth description and analysis to evaluate a programme or intervention</p>	<p><b>Intrinsic</b> – focus on case for its own interest</p> <p><b>Instrumental</b> – case as it illuminates a wider issue</p>



While this classification is simplistic – there are overlaps between the authors’ definitions and a case study may straddle more than one type within an individual authors’ typology – considering the type of case study at the outset is important as it affects the questions asked and the methods selected (Taylor, 2016). This research can be described as ‘instrumental’ (Stake, 1999), ‘story-telling / picture-drawing’ (Bassey, 1995) and ‘descriptive / exploratory’ (Yin, 2009). I am not so much interested in the intrinsic characteristics of the students themselves but rather with the phenomena of geographical knowledge and post-14 subject choices that are made within the context of the school. Equally, I am interested in using the theories outlined in Part I – perspective categorisation theory, perspective influence theory and subject choice theory – as an analytical structure but I also want the flexibility to refine and develop theory from these starting points. Of the three, the place of this research in Yin’s typology is harder to articulate. It is certainly descriptive as I am interested in generating rich and in-depth description of how students represent geographical knowledge and how they account for their post-14 subject choices. However, rather than stopping there, the third research question in particular suggests subsequent research more aligned with an exploratory approach.

### Bounding the case

Having determined the type of case study being considered it is also important to address the question, ‘What is ‘the case’?’ However, answering this is far from straightforward. Despite being naturally suited to the interpretivist theoretical perspective outlined previously, case study can be defined from a range of perspectives outlined in Table 6.3.

Table 6.3 Definitions of aspects of case study from three perspectives

	Positivist	Interpretivist	

The 'bounding of the case' may be different if, for example, Yin's (2009) definition is employed rather than Stake's (1995) definition. Bounding the case is also difficult within the context of this research given the complexity and coverage of my research questions. I am interested in researching 'students' rather than a single 'student' and while my first two questions focus on geographical knowledge, the third is broader and set within a school context. In order for these questions to be answered effectively, I define the case in this research as 'GCSE and A level students at Clayton's Academy'<sup>75</sup>. This bounding both fits with the type of case study outlined in Table 6.2 and with the definitions of the three authors highlighted in Table 6.3.

### Reliability and validity

Reliability – the repeatability of research findings – and validity – the credibility or believability of the research – are often used as indicators of research quality. However, as Thomas (2016: 64) explains, these notions of rigor have been imported from other types of research - principally, in the case of reliability, from psychometrics – and therefore, their use in case study is far from clear. The terms do not sit well with some researchers; Stenbacka (2001: 552) suggests that if a case study is discussed with reliability as a criterion then the research itself is probably not very good. Other commentators argue however, that a discussion of reliability and validity is important, otherwise how is the quality of research to be judged? (Lincoln and Guba, 1985). Healy and Perry (2000) pragmatically suggest that the quality of research in a particular paradigm should be judged according to that paradigm's terms; instead of reliability and validity, credibility, consistency, dependability and applicability have all been suggested as markers of quality to establish trustworthiness in case study research (Lincoln and Guba, 1985; Bassey, 1999; Golafshani, 2003). Here, I adopt Bassey's (1999) definition

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<sup>75</sup> It is worth noting that within Part III three 'case studies' have been used to illustrate three students' stories in depth. The use of the term 'case study' in this instance refers to the richness and detail of the data rather than implying that the individual students are, themselves, cases.

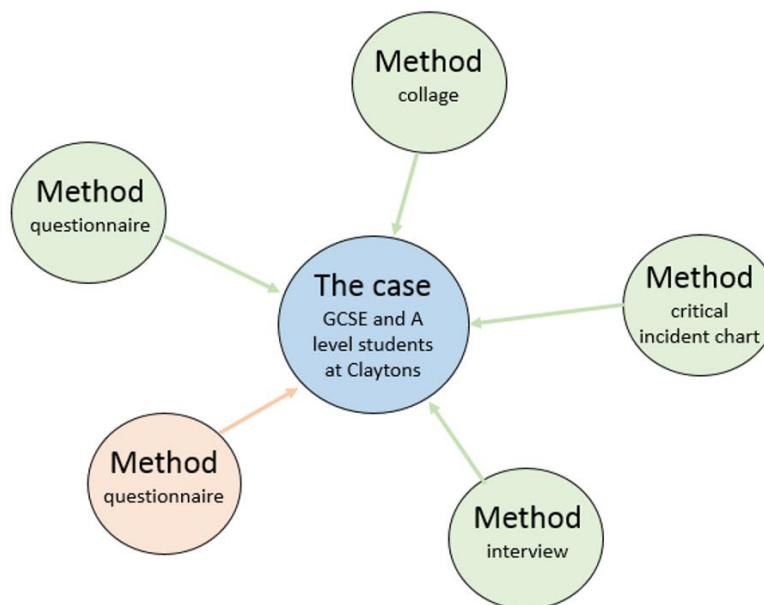
of ‘trustworthiness’ (see Table 6.3) which I discuss in the context of this research in Table 6.4.

*Table 6.4 Ensuring trustworthiness in case study research (After: Bassey, 1999: 75)*

<b>Collection of raw data</b>	
Has there been prolonged engagement with data sources?	<i>As an insider, I have had a long engagement with the school context – I was a teacher there for sixteen years. Many of the students as researchers were in my tutor group and I taught several of the students involved within both the first and the second phase of research. However, there were three students in the second phase who I did not know well although the engagement with the students during the data collection phase and particularly the semi-structured interview enabled a building of trust and an understanding of the individual students’ context and issues.</i>
Has there been persistent observation of emerging issues?	<i>The focusing upon salient features of each student emerged particularly during the collage and critical incident charting phase. I ensured that I brought these to the fore during the interview either to discover that they were not relevant or, in the majority of cases, to shed light on a deeper understanding of them which I have tried to capture in Part III.</i>
Have raw data been adequately checked with their sources?	<i>Transcripts of interviews were given to the participants so that they could check that it was an accurate record and that they were happy for it to be used in the research.</i>
<b>Analysis of raw data</b>	
Has there been sufficient triangulation of raw data leading to analytical statements?	<i>This research applies investigator and between-method methodological triangulation to strengthen confidence in my findings. This involved bringing together data from different sources (multiple students), from the same source but using different methods of enquiry (questionnaire, collage, semi-structured interview, critical incident charting and observation) and by using different observers (teacher-researcher and student-researcher strands) in order to make analytical statements which illuminated these features.</i>
<b>Interpretation of analytical statements</b>	
Has the working hypothesis, or evaluation, or emerging story been systematically tested against the analytical statements?	<i>Throughout, I have used data which is representative of the students’ stories and of their representations rather than focusing on the unusual. The process of data analysis detailed in Chapter 8 enabled this.</i>
Has a critical friend thoroughly tried to challenge the findings?	<i>We have used research community meetings so that other students could act as critical friends. They were invaluable throughout the research process and were willing to give time to question the processes and outcomes to strengthen the research. As a community we decided not to formalise this critical friendship process or to allocate only one friend as it was felt that a range of perspectives would be more beneficial and less restrictive.</i>
<b>Reporting of the research</b>	
Is the account of the research sufficiently detailed to give the reader confidence in the findings?	<i>I have justified my decisions at each stage of the process and throughout all of the chapters in this thesis to demonstrate the value of this research. Also, by engaging critical friends at all stages of the process I believe I have struck a balance between too much detail (which may confuse or fatigue the reader) and too little (evidence is too thin making it difficult for the reader to feel conclusions are valid).</i>
Does the case record provide an adequate audit trail?	<i>I have organised all of the documents generated– interview transcripts, field notebook, collages, critical incident charts – into a case record to demonstrate systematic processes of both data collection and analysis. This is naturally how I work and so has been relatively straightforward. However, it also allowed my supervisor to audit the research at various stages to ensure that my conclusions were justified.</i>

## Triangulation

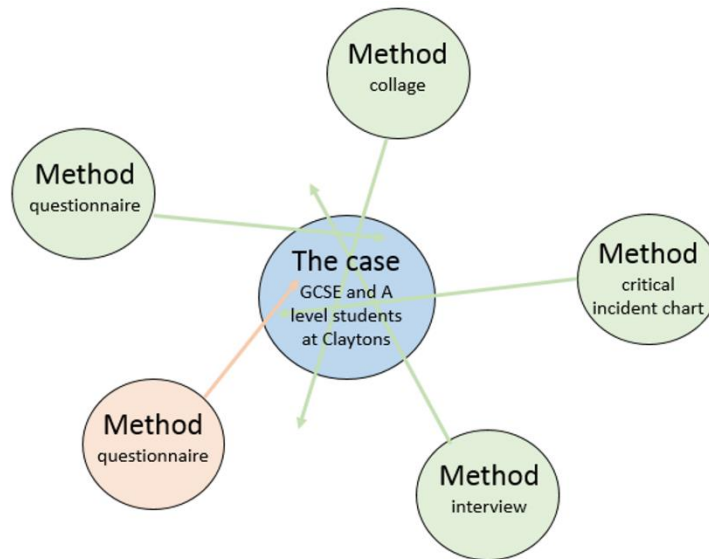
While Bassey (1999) advocates trustworthiness as an indicator of quality, Stake (1995) suggests that triangulation is a useful strategy and one which accords with the aim of case study which is to look in at the case from different angles and perspectives. Four different types of triangulation are identified by Denzin (1978) – triangulation of data, investigator triangulation, triangulation of theories and methodological triangulation – and the extent to which they apply in this research is briefly discussed in Table 6.4. However, using triangulation as a strategy for validation, as Stake (1995) suggests, is potentially problematic. It suggests that multiple methods should be employed to gain a complete picture of the case (Silvermann, 1985: 21) (see Figure 6.2<sup>76</sup>). Yet, this belies the complexity of putting the picture of the case together in the first place and suggests that the combination of different methods (quantity) when applied uncritically and without attention to their individual theoretical backgrounds sacrifices quality (Blaikie, 1991).



*Figure 6.2 Employing the triangulation of multiple methods to gain a complete picture of the case*

<sup>76</sup> The different methods are identified as the ones employed in this research (see Section 6.6) and different colours are used to distinguish between the teacher-research strand (green) and the student-researcher strand (orange).

Given this, I prefer to see triangulation less as a validation strategy and more as a way of generating new knowledge. As Flick (2004: 182) explains, triangulation should be 'less a matter of obtaining convergence in the sense of confirmation of what has already been discovered' and more as a way of elucidating 'divergent perspectives' (see Figure 6.3).



*Figure 6.3 Employing the triangulation of multiple methods to generate new knowledge*

## Generalisation

In the same way that reliability and validity are contested within case study, generalisation – the way in which findings are able to be reproduced other contexts - is similarly problematic. Indeed, Thomas (2016) argues that the definition of case study as 'single', 'specific' and 'unique' makes generalisation impossible. He further explains that the criticism of case study being ungeneralisable and lacking rigour, loses its power if it is acknowledged that there are few situations in the social world where this is the case. Instead of 'generalisability', he suggests that the term 'transferability' – where findings are able to be understood in other contexts – be used.

In Table 6.3, the three authors' arguments surrounding rigour in case study research and the generation of theory pivot on their different approaches to generalisation. Yin (2009: 38) makes the distinction between 'statistical generalisation' – where an inference is made about a population based on empirical evidence from a sample and analytic generalisation – where the researcher compares results from a case study to a theory to see whether or not this theory can be supported. It is this analytic generalisation which Yin sees as being appropriate to a case study methodology.

At the other end of the continuum shown in Table 6.3, Stake (1995: 7) seems to agree with Thomas (2016) as he suggests that 'case studies seem a poor basis for generalisation'. He places emphasis on the uniqueness of the case and argues that case study is not an appropriate vehicle for generating theory. Despite this, Stake goes on to define general statements made within a study as 'petite generalisation' and general statements about issues of which the case is one example, as 'grand generalisation'. He also acknowledges that as the reader engages with the case, so they will make links from it to their own context or others they have experienced. They will then be able to support or modify their individual generalisations of the world, a process he terms 'naturalistic generalisation' (1995: 85).

'Fuzzy generalisation' is the approach put forward by Bassey (1999: 52). He argues for a generalisation which sees a particular case study as being one part of a jigsaw; it should be read in the context of the full research report as well as other similar studies in different contexts. The 'fuzziness' which he refers to is a 'built in uncertainty'; that predictions of what may happen can be deduced from previous empirical enquiry but there is no measure of how probable these outcomes are.

My approach to generalisation in the context of this thesis draws from both Bassey's 'fuzzy generalisation' and also Stake's 'naturalistic generalisation'. My methodology and methods could be used in similar research in different contexts. However, given that students with different identities, different voices and different experiences would be heard, there is uncertainty over whether similar findings would emerge. In addition, those

who read this thesis may make links to their own context. In turn this may enable the illumination of things previously unseen or the modification or support of existing generalisations (see Chapter 13).

## 6.6 The research methods

While it is important for methods to follow from my epistemology, theoretical perspective and methodology, pragmatically it is vital to ensure that each method contributes something towards each research question (Table 6.5). Arguably, by removing one or more of these methods enough data could still be collected to answer each question. However, not only does the inclusion of multiple methods result in triangulation (see Section 6.5), but also allows the participants to engage in the research in a variety of different ways to paint a rich and detailed picture.

*Table 6.5 How does each method contribute data for each research question?<sup>77</sup>*

	Questionnaire	Collage	Observation	Critical incident charting	Semi-structured interview
How do students of different ethnicities represent geographical knowledge?					
How do the students' stories relate to their representations?					
How do the students account for the subject choices that they made at GCSE and A level?					

<sup>77</sup> Cells shaded in yellow illustrate that a method may contribute data to the particular research question although it may be partial. Cells shaded in green illustrate methods that provide detailed data for the particular research question.



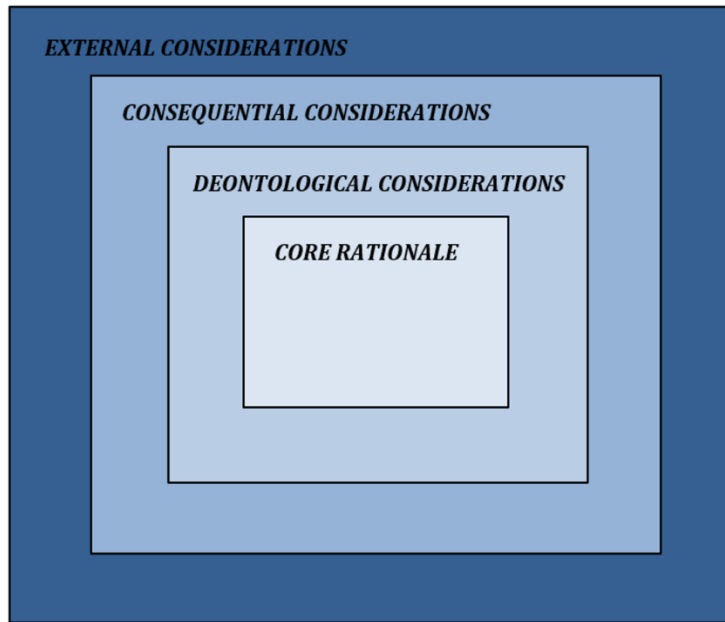
My data collection was split into two phases: the first involved a questionnaire to gather a broad range of views; it also enabled the selection of students for the second phase (explained in detail in Chapter 7). The second focused on the collection of data and analysis relating to representations, stories and option choices (explained in detail in Chapter 8).

## 6.7 Ethical considerations

The ethical issues raised in this research are unique and a universal method of addressing them is unhelpful and constraining (Simons and Usher, 2000; Oliver, 2003). Throughout, I have used my personal judgement which is couched in the descriptive as opposed to the normative dimension. Rather than adopting a specific value position as to what should be, I have represented the students in my own terms and been self-critical and transparent about my positioning as both researcher and author<sup>78</sup>. I used the framework by Stutchbury and Fox (2009) in Figure 6.4 below to consider ethical issues in depth prior to carrying out the research and my thoughts stimulated by their questions are documented in Appendix 6.i. These include following the BERA code of practice (2011) and the British Psychological Society code of ethics and conduct (2009). There are though various ethical dilemmas which I had to consider both during and at the end of the research and I discuss here issues surrounding anonymity, the 'making' of students within my writing and my changing identity during the course of the research.

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<sup>78</sup> Stutchbury and Fox (2009) provide a framework, grounded in moral theory, which enables more complete analyses of ethical dilemmas at a range of levels. However, Seedhouse highlights that although 'it can throw light into unseen corners and can suggest new avenues of thought...it is not a substitute for personal judgement' (1998: 208).



*Figure 6.4 A framework for considering research ethics (After: Stutchbury and Fox, 2009).*

Confidentiality and anonymity are two cornerstones of the codes of ethics outlined in Appendix 6.i and indeed are mentioned many times in the information sheets and consent forms which I presented to the students in my research (see Appendices 7.vi, 7.vii, 7.viii and 7.ix). However, there were three specific ethical challenges which I faced in this regard.

The first was the unexpected way in which the students compromised the protection of their own identity. While I was clear to the students that *I* would respect their confidentiality I did not explicitly make it clear that *they* should be mindful of this also. At the end of her interview Sabah asked to have another look at her collage, explaining that she had told her friends how rubbish her drawing was and wanted to take a photo to show them. By doing this she signalled to me that she had spoken about her involvement in the research and while it was her choice to do so, this had inadvertently compromised her own anonymity and potentially that of other students. The second is a feature of my role as a 21<sup>st</sup> century practitioner-researcher and the significant digital footprint which exists linking me to particular institutions and contexts. Indeed, a fairly cursory Google

search would probably reveal the identity of Claytons although arguably it would be harder to trace the students involved within the second phase of research in particular. These two examples illustrate the ethical dilemmas associated with promising anonymity to students in a data-rich, complex world where, in reality, the level of control I have over this is minimal.

Where some level of control existed I exercised it through the assignation of pseudonyms although this caused a third dilemma. In order to give students ownership I asked them at the beginning of their interview whether they wanted to name themselves. However, with the exception of Philippa they all declined which meant that I needed to create pseudonyms myself. This was not too difficult for those students of White British ethnicity but fraught with ethical challenges for the ethnic minority students; what if I chose a name that was not culturally sensitive or suggested a lower socio-economic class? My solution was to use the names of students from the same ethnic group who I had come across during my teaching career. I was fairly confident that these pseudonyms would be culturally and socially sensitive but it did create further risk of making the context more identifiable.

Ethical decisions surrounding the ‘making’ of people within writing and in dealing with interview transcripts are summarised by Thomson (2016). She asks what it means to leave sensory information, silences, stumbles and intonations out of the written data and suggests that these issues are entwined with how the writer chooses to deal with disorderly thoughts and arguments, the distillation of the essence of the interview and the place of the researcher voice within the analysis and discussion. These are all dilemmas that I have wrestled with throughout the process, particularly as my research aims to foreground the voices of the students. To what extent are the stories told in Part III those of the students? Have I treated them in enough depth and with respect? By transparently outlining my analytical processes in Chapters 7 and 8 and by delving more deeply into the stories of three of the students in the chapters that comprise Part III I hope that I have gone some way to addressing these concerns. However, it is for the reader to decide

whether the student voices are authentic and whether or not I have achieved an effective balance between their voices and mine.

The final issue which I discuss here is how my changing identity over the course of the research, and particularly my change in job and context, has raised several ethical considerations. At the end of my third year of the EdD course, which coincided with the conclusion of my data collection, I changed my job; not only did I leave Claytons but I left teaching. The reasons for this change and its intertwining with my identity as a practitioner-researcher are described in Kitchen (2016) however, it raised a number of issues. The first was the abrupt severing of the relationship which I had with the students involved in the research. I was aware at the beginning of the research that the Year 13s would leave Claytons at the end of my year of data collection. However, I did not anticipate that I also would leave. I managed to collect all of the data required and asked the students to validate their transcripts before the end of the school year however, subsequently there have been issues of accessibility. I no longer have access to whole school data sets (such as the proportion of ethnic minority students attending Claytons) nor do I have access to the students themselves should I wish to clarify any aspect of their stories. Additionally, the stimulus for this research arose from the students that sat in front of me in my geography classroom at Claytons. After leaving the school I could no longer straightforwardly assess the impact of this research in the context in which it was conceived. Arguably, my new role as secondary curriculum leader for the Geographical Association allows my research to have a wider readership and more national impact, but I must balance my enthusiasm for sharing my findings with an acknowledgement that this is an example of small-scale research unique to my initial situation.

## 6.8 Issues of power

Issues of power<sup>79</sup> are important when conducting research with young people and those of a different ethnicity to oneself and these are considered here at three stages of the research process – conception, methodology and interpretation.

It could be argued that my position as a White British researcher makes it difficult to research those of a different ethnicity to myself. Mirza (1995) questions whether it is ethical to focus research on minorities as they become objects of study and thus of cultural tourism, while Burgess (1989) suggests that the differences in status and power between White researchers and those of a different ethnicity being researched are so great that it is virtually impossible to elicit meaningful information. Conversely, it could be argued that it is unethical *not* to focus on ethnicity in educational research as it is impossible to understand the educational experiences of ethnic minority students if they are not researched and any research which questions the implicit assumption of a White norm within educational research is presumably a good thing (Figueroa, 2000). While power relations are inherent in the choice of topic, they are also present contextually. Schools are institutions and the power relations within them are dynamic, complex and operate over a range of areas including professional power, group dynamics, curriculum power, assessment and reporting, administrative power, consent and ethics, and power surrounding research and its outcomes (Foucault, 1980; Edwards, 2004).

Valentine (1999) identifies that issues of power may also influence the choice of methods as children can be intimidated by those she terms ‘adultist’. For example, interviews often require the interviewee to be articulate and literate and she highlights the importance of selecting methods which allow children to communicate effectively. However, she also warns that it is important not to stereotype children as unable to cope with such methods and therefore, I piloted my methods to ensure that the students were comfortable with them and the data which emerged was usable. Valentine goes on to suggest that it is

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<sup>79</sup> Here I use the definition of power as, ‘The right to have your definition of reality prevail over other people’s definition of reality’ (John, 2003: 47)

often not the method which exploits the power relationship between the researcher and the researched, but the way in which it is carried out. Students in a school situation are used to complying and therefore may feel obligated to do so within this context. For example, they may consent to being observed because the alternative is to physically remove themselves from the classroom. However, the extent to which this was in issue in my relationship with the students in this study is debateable. Rather than a culture of compliance, there was a culture of respect and openness in the school. My status as Head of Department and my length of service at the school meant that even those students whom I had not taught, knew and seemed to respect me. The students who consented did so because they wanted to be part of the study, while those who did not were open and honest about their decision.

It is in the interpretation phase where the researcher arguably wields the most power (McKeever, 2000; Valentine, 1999). Foster *et al.* state that 'the purpose of educational research should be to produce knowledge...rather than to eradicate inequality' (1996: 40); the implication being that research is value neutral. I cannot support this view as my feelings regarding ethnicity and my lens of interpretation on their experiences must have an impact. How can I truthfully and effectively interpret data if I have no experience of being from an ethnic minority and my experience of being a child is distant and of another time? Having said this, while I acknowledge that the research cannot be value neutral it can be value critical. I take Troyna's position of partisan research since all research 'derives from the social identity and values of the researcher' (1995: 403) and believe that, by being explicit about my positioning, the reader can engage with the research from an informed position.

## 6.9 Conclusion

In summary, my research is grounded in a constructivist epistemology which has an interpretivist theoretical perspective and a case study methodology. Multiple methods of

data collection were employed including questionnaires, collages, critical incident charts, observation and semi-structured interviews and the advantages, disadvantages, piloting and analysis of each are discussed in more depth in Chapters 7 and 8. In addition, I have addressed the ethical dilemmas and power dynamics inherent in this research. It is unlikely that I envisaged all of these at the outset; indeed, it could be argued that even suggesting this is problematic (Horton, 2008). However, I remained open with all those involved directly and indirectly, discussed the issues which arose with my supervisor, was flexible, regularly questioned my decisions and above all, maintained a moral stance from conception to dissemination. Therefore, I am confident that I addressed all ethical issues that arose.

## Chapter 7

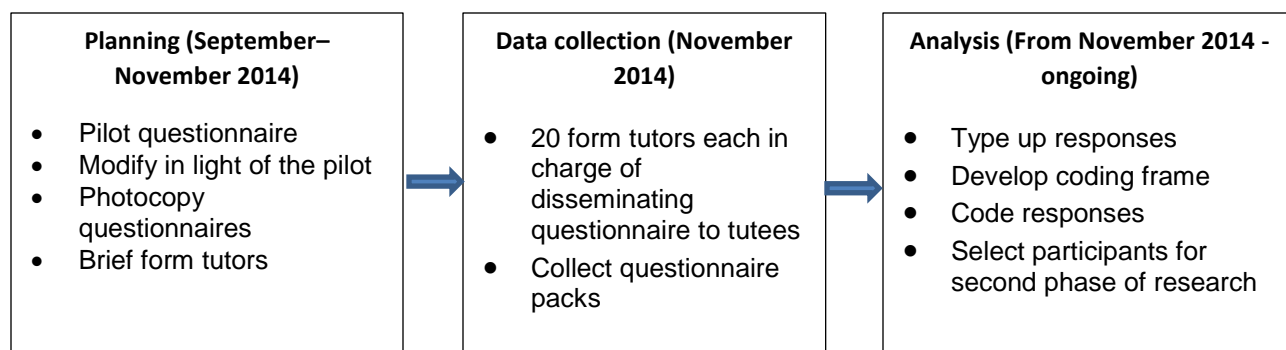
### The first phase of research: questionnaires

#### 7.1 Introduction

A key outcome of the first phase of research was to select 10 sixth form students who would be involved in the second stage. I needed to ensure a mix of students of different ethnicities and experiences of geography who would be willing to opt into the study and provide rich case study detail. A secondary purpose was to determine the range of perspectives of geographical knowledge which existed and whether ethnicity was a factor; it allowed the building of a big picture as a starting point. A large number of students needed to be canvassed; there were 376 students enrolled in Years 12 and 13 at Claytons during the academic year 2014 / 2015. In addition, the information required was straightforward and standardised; they were being asked to provide their definition of geographical knowledge, information relating to their geographical experience and ethnicity and to indicate whether they would be willing to opt into the second phase of research. Therefore, a questionnaire appeared the most appropriate method (Robson, 2002; Sapsford, 2007; Andrews, 2013).

The timescale for the planning, data collection and analysis phases of the questionnaire is described in Figure 7.1. However, the research process for this first phase was non-linear, iterative and complex so, in reality the planning phase began several years prior to the start of the research and the analysis phase continued well beyond.





*Figure 7.1. The timescale for the first phase of research*

## 7.2 The advantages and disadvantages of using questionnaires

While questionnaires appeared the most suitable method due to the volume of participants and the resources available, it is worth highlighting both the advantages and disadvantages of this approach in the context of this research.

Advantages of questionnaires in the context of this research

*Questionnaires are efficient by providing data at low cost and in little time.*

It cost just under £35 to have 400 questionnaires professionally printed which was the only financial cost given postal and travelling costs were non-existent. Additionally, a large number of responses could be accessed within the space of two 25 minute tutor periods. This was important given the need to collect and analyse the responses and select the participants before embarking on the second phase of research.

*The process allows for respondent anonymity.*

While the value of anonymity in small-scale research is uncertain – some people may feel more confident in responding with guaranteed anonymity while others may be uncertain about committing themselves to paper – it was taken here to be an advantage. This was because as a teacher-researcher in my own context, assuring anonymity was more likely

to encourage the students to be honest in their responses and was deemed more ethical than the alternative (Munn and Drever, 1990; Oppenheim, 1992; Cohen *et al.*, 2000; Gillham, 2007; Ogden, 2008).

#### *Questions are standardised*

All of the respondents were given the same standardised questions which had been carefully piloted (Appendix 7.i, 7.ii and 7.iii). Despite this, it is debateable whether all the students understood the questions in the same way as there were some responses which focused on the purpose or usefulness of geographical knowledge rather than a definition (Gillham, 2007).

#### *Analysis of questionnaire responses is fairly straightforward*

Closed questions are relatively easy to code provided that the person coding is consistent within their coding frame. I was the sole coder and I am confident that my coding was consistent and accurate. However, the analysis of open questions involves simplifying individual responses into a smaller number of similar groups; a process which inevitably involves a loss of information (Robson, 2002). The process I went through is described within Section 7.5 and I have illustrated this using the students as examples in the introduction to Part III so that the reader may further understand this.

#### Disadvantages of questionnaires in the context of this research

##### *Questionnaires can have a low response rate*

Robson (2002) suggests that achieving a high response rate with self-administered questionnaires is difficult, while Gillham (2007), Punch (2003) and Gay (1992) comment respectively that response rates of more than 50%, 60% and 70% are regarded as satisfactory. Edwards *et al.* (1997) put forward a series of suggestions for maximising the response rate, several of which were implemented in this study. The questionnaires were administered during a tutor period where smaller groups of between 17 and 21 students are supervised by their form tutor. The students were therefore captive which increased

the response rate. However, to address potential ethical concerns, students were briefed beforehand and given the option to opt out of the process<sup>80</sup>. I did consider using the online questionnaire programme 'survey monkey' to capture responses. However, there were not enough computers available during the tutor period for all students to record their responses and, from previous experience, I knew that if students did not complete the questionnaires at this time then the response rate was likely to be low.

*Data are affected by the characteristics of the respondents*

This is seemingly obvious and an inherent feature given my interpretivist stance. However, there are some characteristics which can be a disadvantage in the completion of questionnaires. These include memory, knowledge, experience, motivation and personality. For example, few people are strongly motivated to complete questionnaires unless they see the personal relevance or importance (Robson, 2002). The personality of the respondent may affect the likelihood of them being truthful in their responses or affect their response to personal or sensitive questions.

*Respondents may misunderstand the question or not treat the questionnaire seriously and this may be difficult to detect*

Developing questions that are not misunderstood is challenging although attention to the wording and piloting can eliminate this to an extent (Foddy, 1994). Despite this and given human nature, misunderstandings can never fully be eliminated (Robson, 2002; Gillham, 2007). In a similar vein, the impersonal nature of questionnaires means that respondents may not see the honesty and integrity of their answers as a priority; there is no way of knowing how truthful the respondents are being and how much thought they are putting into their responses.

*Questionnaires are descriptive rather than explanatory*

Robson (2002) suggests that, in comparison to interviews, asking a large number of open-ended questions is likely to be inefficient and ineffective, questionnaires are therefore not

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<sup>80</sup> One student did this formally by excusing herself in advance. However, it is likely that others excused themselves by not turning up to the tutor period.

well-suited to exploratory research. However, while the over-arching purpose of this research is exploratory the main purpose of the questionnaires was to provide information about the characteristics of the students and was therefore descriptive.

### 7.3 Piloting the questionnaire

The pilot served the dual function of testing the suitability, clarity and length of the questions and providing training in administration and analysis (Punch, 2003). A group of 11 Year 13 students were asked to complete pilot questionnaires during a registration period in May 2013 and written feedback was requested (see Appendix 7.i and 7.ii). The students were generally positive but there were two areas of concern. Firstly, these were students who were regularly asked their opinion and were articulate at providing it; they were disappointed that the questionnaire did not ask for their opinion on issues surrounding the topic. Detailed information was not given to either the students or their form tutor regarding the purpose of the questionnaire and so this confusion was understandable. This was rectified in the administration of the final questionnaires as students and their parents were provided with an information sheet and tutors were fully briefed. Secondly, particularly for those who had not opted to take geography at GCSE or A level, they found the subtleties between the eight definitions of geographical knowledge challenging. Comments about them being similar were common and associated with situations where the respondent had selected the rankings with difficulty. The reason for this may be methodological in that the time available for completion was short and students may not have had the time or the inclination to consider the subtleties in the statements. However, it could be epistemological and highlight that students lack an understanding of different facets of geographical knowledge; it was typically students who had not studied geography at GCSE or A level who had difficulty with this task. Consequently, the questionnaire was modified in light of the feedback to include an open question where students are asked to define geographical knowledge in their own words (Appendix 7.iii). While this made analysis harder as individual answers had to be coded

and grouped to produce a profile, it ultimately produced more robust data as the question was more accessible and more likely to accurately convey students' actual views.

## 7.4 Administering the questionnaire

It was planned that the questionnaires would be completed during November 2014 and discussions took place between myself and the Heads of Year 12 and 13 and Head of Sixth Form to arrange a mutually convenient time. Two tutor periods were set aside for the questionnaires to be completed; Monday 17<sup>th</sup> November 2014 (Year 13) and Thursday 20<sup>th</sup> November 2014 (Year 12). Prior to these dates an e-mail and instructions were sent to the 20 sixth form tutors giving instructions for their administration (Appendix 7.iv and 7.v). This allowed the delegation of this process to the tutors which meant that questionnaires were carried out simultaneously and resulted in a high response rate (81.5% for Year 12 and 85.6% for Year 13). To ensure transparency and to provide information for the students involved, a letter was sent to all students and their parents using the SchoolComms letter distribution system in the week prior to the questionnaires being completed (Appendix 7.vi)<sup>81</sup>.

The administration of the questionnaires went smoothly. While there is no guarantee the instructions were followed exactly, responses were received from all of the Year 13 tutor groups and all but one of the Year 12 tutor groups<sup>82</sup>. There were a number of student absentees – 16 in Year 12 and 26 in Year 13 – but even taking this into account the process resulted in 314 completed responses or 83.6% of the cohort. While the relationship between response rate and survey accuracy is a complex one, there is general consensus that a high response rate of over 80% is preferable as this provides a more complete picture of the sampled population (Evans, 1991; Gillham, 2007).

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<sup>81</sup> One parent contacted the school having received the information letter to say that her daughter did not want to be part of the research. I informed the girl's tutor so that she could withdraw the girl from the research although in the event, the girl was absent from the tutor period.

<sup>82</sup> The tutor of the group where questionnaires were not received was absent on the day of dissemination.

## 7.5. Analysing the questionnaire

Once the responses had been received, each questionnaire was numbered and I engaged in the first level of analysis by entering the responses into a table set up in Microsoft Word (Gillham, 2007) (see Table 7.1). This was a straightforward process, however, in some cases students had phrased sentences awkwardly or had written illegibly; this served to make the meaning unclear. Where possible, I used the language of the student and if I could not read their handwriting I substituted asterisks for the illegible words (see Table 7.1, questionnaire number 158).

*Table 7.1 An extract from the table set up in Microsoft Word*

<b>Number</b>	<b>Paragraph defining 'geographical knowledge'</b>	<b>Key words</b>	<b>GCSE</b>	<b>AS</b>	<b>A2</b>	<b>sixth form subjects</b>	<b>Year started</b>	<b>Ethnicity</b>	<b>Second phase of research?</b>
156	The study of natural features of the earth and the people who live on it.	Population, the world, culture, weather / climate, countries	Y	N	N	Bi, Ch, CritTh, Ma, Ph	Year 7	White British	N
157	What one knows on the subject of geography. Natural causes that occur in the world	Geography, countries, the world, tectonic plates, natural disasters, volcanoes, humans	N	N	N	EnLit, Pol, BS, Hi	Year 7	White British	N
158	Geography is what happens in the world, it is *** between various countries.	Earth, world, countries, geography, volcanoes, tectonic plates, natural disasters, people, ethnicity, culture.	Y	N	N	EnLit, Pol, Hi	Year 7	White British	N

One purpose of the analysis was to determine a sub-sample of 10 students with a range of geographical experiences and ethnicities who would be prepared to opt into the second phase of research (see Section 7.6). A second purpose was to determine the range of geographical perspectives of geographical knowledge which students had written in their responses to question 1: 'Write a short paragraph which defines what you understand by the term 'geographical knowledge'. Typing up the responses allowed an initial and

subjective analysis of their range (Oppenheim, 1992). However, developing a coding frame for analysis proved to be far from straightforward and I ended up mixing an *a priori* and an *a posteriori* approach.

Initially, I followed a suggestion of Walford (1996) and turned to previous attempts at classifying definitions of geography to determine their suitability (Table 7.2)<sup>83</sup>. The consideration of these existing typologies resulted in three main observations. Firstly, the contexts of these coding frames were diverse, ranging from textbooks (Acheson, 1994) to secondary PGCE geography students (Walford, 1996) but, with the exception of Catling (2004), a fundamental similarity was that they emerged from within the discipline of geography. Arguably, most of my participants were geography 'outsiders' and so I had to consider whether or not it appropriate to use existing 'insider' classifications as a coding frame. Secondly, the systems used were exclusive in the sense that all the responses within each piece of research fitted into that particular classification system. Walford (1996) discounted using previous coding frames due to the fact that many of his responses could not easily be fitted. I therefore needed to decide whether or not it was sensible to try to fit my responses into an existing framework. Finally, each of the existing coding frames were of their own time. The most recent, Catling (2004), was written over a decade ago at a time when both geography and geography education were very different. This needed to be taken into account as I was wary of applying classifications which had little contemporary relevance.

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<sup>83</sup> It should be noted that even though both Walford (1996) and Catling (2004) use the same terms – placeist – their meanings are not fully congruent. For example, Catling places the emphasis on understanding people's lives within their culture and community, whereas Walford identifies the knowledge and character of place.

Table 7.2 A summary of previous classifications of definitions of geography

Reference	Categories identified	Comments
Pattinson (1964)	Four 'traditions' of geography identified and traced back to Greek origins: <i>The Earth-science tradition (Aristotle)</i> <i>The area-studies tradition (Strabo)</i> <i>The man-land tradition (Hippocrates)</i> <i>The spatial tradition (Ptolemy)</i>	Focuses on the historical roots of geography rather than its contemporary relevance. However, Robinson (1976) calls these traditions a 'happy compromise' between numerous main concepts and a single definition.
McNee (1967)	Six 'value systems' identified: <i>Globalism (the Earth as a whole)</i> <i>Localism (the need to study small areas 'in situ')</i> <i>Holism (geographic synthesis)</i> <i>Map-love (maps as aesthetic experience)</i> <i>Earth-reverence (strong concern for conservation)</i> <i>Geographical enquiry (search for new truths)</i>	Focuses on values rather than knowledge. American in background although this is not necessarily problematic as Bradbeer <i>et al.</i> (2004) suggest no clear patterns of national variation between students' conceptions of geography in the UK, Australia, New Zealand and the US.
Livingstone (1992)	Ten 'conversations' in the history of geography: <i>Explorational</i> <i>'Magical' (concerned with astrology)</i> <i>Cartographic</i> <i>Theological</i> <i>Imperial</i> <i>Regional</i> <i>Geography as the 'go-between' (nature and humanity)</i> <i>Geography as spatial science</i> <i>Geography humanism (emotion, meaning, value)</i> <i>The 'Geographising' of social theory</i>	While Walford (1996) claims in his review of previous classifications that this is the most authoritative, it is also the case that most of the 'conversations' lack contemporary relevance. It could also be suggested that the number of categories involved is unwieldy.
Acheson (1994)	Seven 'viewpoints' identified over a 30 year period: <i>Spatial</i> <i>Physical (environmentally oriented)</i> <i>Behavioural</i> <i>Humanistic</i> <i>Welfare</i> <i>Radical</i> <i>Postmodern</i>	Viewpoints identified through an analysis of textbooks although classification is not thoroughly or clearly justified.
Walford (1996)	Four 'classifications' identified: <i>Spatialists (Spatial Analysis)</i> <i>Interactionists (Links between physical and human)</i> <i>Synthesisers (Geography as cross-disciplinary)</i> <i>Placeists (Character of place, regions and countries)</i>	Focuses on Secondary geography trainee teachers' perceptions over the course of 5 years (1990 – 1994).
Catling (2004)	Five 'categorisations' identified: <i>Globalists (focus on the variety of environments and countries – global interest)</i> <i>Earthists (knowledge and understanding about how the world works)</i> <i>Interactionists (Interrelationships between social and natural processes)</i> <i>Placeists (Understanding and developing a sense of place)</i> <i>Environmentalists (Environmental concerns, issues and sustainability)</i>	Focuses on primary trainee teachers' perceptions (non-specialist geographers and therefore 'outsiders' to the discipline). Adopted by Alkis (2009) in his research into Turkish geography trainee teachers' perceptions of geography due to the categorisations overlap with the themes in the new geographic curriculum of Turkey.



Given these observations, I decided to use a more grounded approach, similar to that described in Catling (2004), to develop the coding frame (Tilbury and Walford, 1996; Cohen *et al.*, 2000; Grbich, 2013). The intention was for classifications to emerge from the statements themselves. Initial classifications were suggested during the typing up of the statements and, once these had been generated, the statements were classified into one of the categories (Saldaña, 2013). This process was then repeated a further three times; each time classification was blind i.e. I started with a clean sheet of statements each time and had limited recollection of how they had previously been categorised. After four cycles there emerged a consistency in the categorisation of statements, although a small number were repeatedly classified in different ways as they contained a number of different perspectives. In his analysis, Walford (1996) allowed such statements to straddle more than one of his defined categories however, here the decision was made to ascribe only one code according to the category that they had been assigned to most often.

Table 7.3 details the coding frame which emerged from the data. The names of these categories reflected the data however, similarities with both Walford and Catling's categories are also apparent. This was done partly to avoid confusion – two similar categories named differently would add a further layer of complexity – and partly because despite being grounded in the data I was aware of both Walford and Catling's categorisations while I was developing my own<sup>84</sup>.

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<sup>84</sup> Examples of statements have been chosen to illustrate each of the five categories in Table 7.3 and there is an overarching statement describing the perspective. The percentage of the statements described by each of the perspectives has also been calculated to allow direct comparison with both Walford and Catling's findings (see Chapter 10).

Table 7.3. The coding frame used in the analysis of the questionnaire

Perspective	General description	Example of statements	Proportion of statements
Placeists	Geographical knowledge focusing on the locations and characteristics of places	<p>"Knowing where countries are and their capitals" (221)</p> <p>"The term geographical knowledge explains what makes a place what it is – i.e. Descriptions of the land itself as well as the people in it" (286)</p>	81 / 314 = 25.8%
Generalists	Simple statements which refer to geographical knowledge being about 'Geography'. Key words included suggest a basic understanding of geography which covered a variety of physical and human topics	"Understanding of the world geographically" (36)	38 / 314 = 12.1%
Interactionists	Geographical knowledge that emphasises the link between physical and human processes.	<p>"Geographical knowledge is the understanding of natural processes in the world, but also how human populations function and interact with the world. Simply, it is the knowledge of how landforms are formed or what influences population change for example, but a deeper knowledge encompasses the understanding of how these are linked" (16)</p> <p>"This is increasing knowledge of the world around us from both a physical and human perspective. It is the linking of how physical factors such as geographic location impact society and vice versa. It is important to learn these aspects to be able to link different aspects of geography to allow us to reduce problems in the world today" (122)</p>	47 / 314 = 15.0%
Thematicists	Geographical knowledge focusing on the description and explanation of patterns and processes relating to how the world works and which highlight thematic understanding of both human and physical geography	<p>"Geographical knowledge looks at both human and physical geography. Human geography looks at people – where they live, MEDC or LEDC? Population and birth and death rates for example. Physical geography looks at the formation and activity of the earth through topics such as tectonic plates and weather and climate" (42)</p> <p>"To me, 'geographical knowledge' refers to an understanding of physical features such as volcanoes and glaciers, and of populations and cultures of different areas as well as their location on a map. It encompasses an awareness of a variety of areas on a global scale" (94)</p>	131 / 314 = 41.7%
Synthesisers	Geographical knowledge which stresses geography's role in synthesising from different disciplines	<p>"Geographical knowledge is an understanding of countries demographic compositions, why they experience certain weather patterns / natural disasters etc. It is fed by an understanding of politics, international relations, history, biology and chemistry" (152)</p> <p>"The ability to synthesise knowledge from all areas of study into a way in which we can start to understand the world as a whole" (155)</p>	5 / 314 = 1.6%
No response	-	-	12 / 314 = 3.8%

Issues of validity and reliability are discussed in Chapter 6 however, it is worth pausing here to consider the truthfulness of this data which has been reduced to these five categories. While every effort was made to code in a consistent way, these are open-ended answers which, in some cases, straddled two or more codes. Also, Cohen *et al.* (2000) suggest that while coding is usually undertaken by the researcher there is a case, outlined by Sudman and Bradburn (1982) that participants are best placed for coding their own responses. While this is seen to be particularly valuable in open-ended responses I made the decision not to due to the ethical difficulties in identifying and matching the students to their questionnaires.

The analysis described in this section using ideas taken from both Walford (1996) and Catling (2004) provided a structure which I also found useful as a starting point for writing up my findings regarding student representations of geographical knowledge in Chapter 10. Although a mixture of both categorisations and my own, this theory provided a framework, however it lacked a name for reference due to its small-scale nature. Here, I took the advice of my research community co-ordinator who suggested I name the theory myself using the language of the authors. Hereafter, I refer to this process as 'perspective categorisation theory'; the grouping or categorisation of different views or perspectives of, in this instance, geography.

A fundamental issue of this first research phase relates to the volume of data generated by the questionnaires and the realisation that the limited scope of this thesis means that much of the data remains unanalysed. For example, data was collected on the A level subjects studied by the students and it would be interesting to analyse this in relation to both their ethnicities and their statements of geographical knowledge. Also, the key words associated with geography have not been looked at in specific detail although a word cloud was created which identified the most common (Figure 7.2).



arose. In the event I need not have been concerned as 75 students volunteered to be part of the second phase. From these 75 responses, 10 students were sampled in a stratified random way to ensure a mix of ethnicities and experiences. 13 of these students were non-White British with the remaining 62 being White British yet, as I wanted to ensure a broad a spread of ethnicities rather than a proportional sample, 7 of the 10 places were allocated to non-White British and 3 to White British. Students who were the sole respondents from a particular ethnic group were automatically included while multiple respondents from an ethnic group were sorted further into their level of geographical experience and then randomly sampled<sup>86</sup>.

Having initially selected 10 students from the 75 who expressed an interest in being part of the second phase of research I then looked at the spread of their perceptions of geographical knowledge and found they were dominated by placeists. I wanted the students in the second phase to represent as broad a range of perspectives as possible and so I re-sampled the three White British students adopting the same process as above. These students were then sent a covering letter (Appendix 7.vii), information sheet (Appendix 7.viii) and consent form (Appendix 7.ix) inviting them to be part of the second phase of research.

Having given the students the choice whether or not to participate, 5 students felt that they could not commit to the research and withdrew at this stage. Other students were selected to take their places using the same sampling strategy as employed previously; they were also given the same covering letter (albeit with a different deadline), information sheet and consent form. By the middle of March 2015 I had a final sample of 8 students who were willing to take part (Table 7.4). This table identifies the students by their questionnaire number and includes their paragraph defining geographical knowledge, which has been ascribed a code (see Table 7.3). It also shows their experience of geography – whether or not they took the subject at GCSE, AS and A level – and ethnicity which were the two criteria on which the students were sampled. The sample of 8 was two short of my initial target however, it was important to start the second phase of

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<sup>86</sup> This was done by writing the questionnaire numbers onto small pieces of paper and picking them out of a box.

research before May when the students left (both Year 12 and 13 go on study leave and Year 13 would not return).

*Table 7.4. The eight students in the second phase of research*

<b>Questionnaire number and Year</b>	<b>Paragraph defining geographical knowledge</b>	<b>GCSE?</b>	<b>AS level?</b>	<b>A level?</b>	<b>Ethnicity</b>
16 Year 13	Geographical knowledge is the understanding of natural processes in the world, but also how human populations function and interact with the world. Simply, it is the knowledge of how landforms are formed or what influences population change for example, but a deeper knowledge encompasses the understanding of how these are linked	Y	Y	Y	White and Asian
17 Year 13	I understand geographical knowledge as being able to identify and explain geographical landforms (like spits, bars), for example, they can say <u>how</u> something is formed. This includes human geography as with 'geographical knowledge' someone may be able to find the root cause of why there are so many living in slums (sorry, very GCSE!)	Y	N	N	Other White background
92 Year 13	Geographical knowledge is certain facts, and rules and principles which have been discovered, acquired or observed to do with the physical make-up of the world, its atmosphere and inhabitation in relation to one another, often revealing repeating trends and patterns which follow these rules and continue in cycles.	Y	Y	N	White British
113 Year 13	'Geographical knowledge' refers to the understanding of the world, whether that be in terms of its physical nature, population diversity or relationships between countries. This could also be in the form of understanding measurements of geographical aspects, relating knowledge to maps or diagrams or considering the development of a particular area.	N	N	N	White British
170 Year 12	The physical land mass; and their political borders; the physical landscape and how / if political borders have any correlation to how countries are divided ie. a river may separate two countries or why the US has straight state borders)	Y	N	N	Chinese
223 Year 12	Geographical knowledge can be divided into the knowledge of physical processes which are apparent in the world as well as the study of humans and patterns that occur within the past as well as the present. For example, geography covers geology, demographic changes / patterns, rivers, oceanography etc.	Y	Y	Y	Bangladeshi
226 Year 12	Geographical knowledge is understanding the world knowing about human and environmental aspects of the world and the effect they have. It also encompasses the way the world is changing; both scientifically and socially.	Y	N	N	White British
279 Year 12	Human and physical geography contribute to a wider knowledge of society	N	N	N	Pakistani

## 7.7 Conclusion

The first phase of the research was effective in that it satisfied its two aims; it allowed the rigorous selection of students for the second phase of research and the analysis of statements to give a broad picture of views of geographical knowledge. However, if questionnaires are completed quickly and with little thought as Cohen *et al.* (2000) and Gillham (2007) suggest, are students more likely to fall back on stereotypes of geographical knowledge when asked to write their definitions? While this is quite possibly the case this is also one of the main reasons why multiple methods are engaged within the second phase of research which are described in the following chapter.

## Chapter 8

# The second phase of research: collages, critical incident charts and semi-structured interviews

### 8.1 Introduction

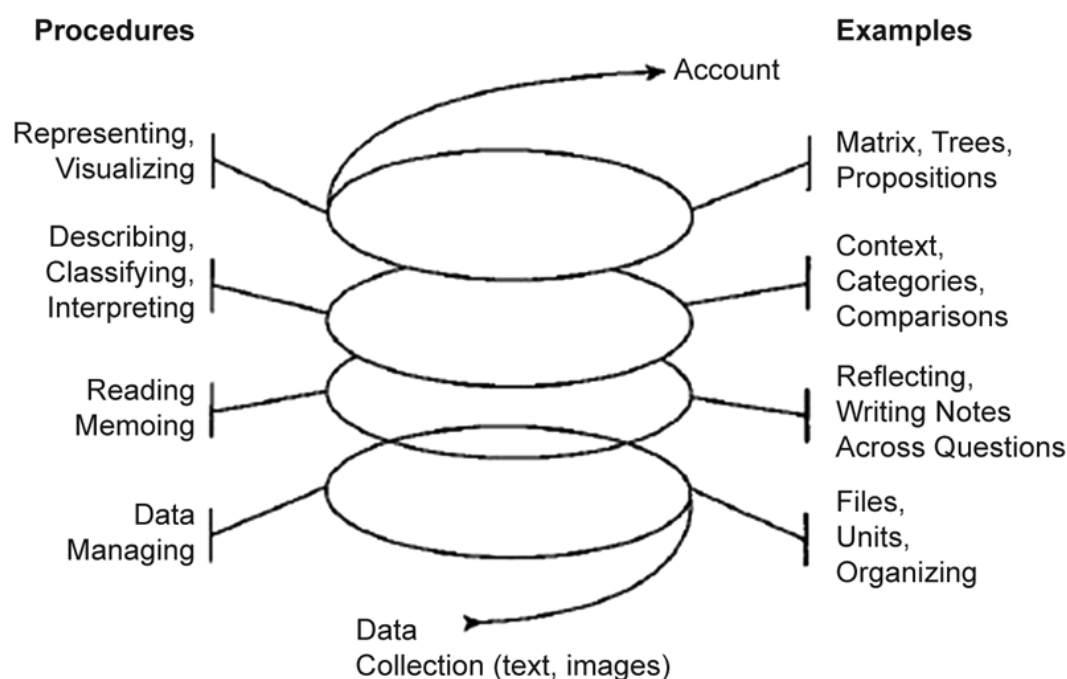
As described in Section 6.5, I adopt a predominantly Stakian view of case study (which overlaps at points with Bassey's perspective on trustworthiness and generalisation) and this shaped the decisions made regarding data collection methods and analysis within the second phase of research. Key to this is Stake's assertion that 'a case study is defined by interest in individual cases, not by the methods of inquiry used' (Stake, 2003: 134). He further suggests that, although some methods such as observation and interview are probably more fruitful than others, it is the skill of the researcher in recognising 'good sources of data' which is most vital (Stake, 1995: 50). One purpose of this chapter then is to clearly explain how the methods chosen have generated data which effectively represent this case study.

A second purpose of this chapter is to explain the process of data analysis. Here, Stake is clear that 'analysis essentially means taking...our impressions, our observations apart' (1995: 71). He advocates a relaxed stance which favours intuition over analysis protocols although I do not want to imply that this approach lacks robustness. Indeed, quite the contrary as he also points out that 'knowing what leads to significant understanding, recognising good sources of data and consciously and unconsciously testing out the veracity of their eyes...requires sensitivity and scepticism' (Stake, 1995: 50). Interpretation is a highly skilful process. Practically, Stake suggests that 'each researcher needs, through experience and reflection, to find the forms of analysis that work for him or her' (1995: 77). While I appreciate the breadth and flexibility this position allows, I am aware that my experience of analysis as a novice researcher is minimal. I consequently



draw systematically from the theories identified in Part I to develop a protocol and follow the spiral developed by Creswell (2013) to provide structure to the analysis (Figure 8.1). I am also mindful throughout of my positioning and that the data must generate a comprehensive and accurate description of the case as presented in Part III.

The following sections detail my decisions and focus on the processes of generating data and analysis. The methods are discussed in the order in which they were undertaken by the students. Sections 8.3 and 8.4 focus on the collages, sections 8.5 and 8.6 on the critical incident charts and sections 8.7 and 8.8 on the semi-structured interview. Each method was carried out in a Training Room<sup>87</sup> (Appendix 8iv) and on a separate occasion with anything from two days to a week between tasks. Separate to this was observation which has added richness to the case study and is described in Section 8.9. Finally, piloting the techniques was an important inclusion in my registration portfolio and so Section 8.2, which follows, provides a brief summary.



*Figure 8.1 The data analysis spiral (After: Creswell, 2013)*

<sup>87</sup> There were two 'Training Rooms' in the school which were used for meetings and staff training.

## 8.2 Piloting the second phase of research

While a pilot study does not guarantee the success of the second phase of research, it can increase the likelihood (Van Teijlingen and Hundley, 2001). Therefore, before I embarked upon this phase of data collection I piloted the three methods – collage, critical incident chart and semi-structured interview - with Hannah<sup>88</sup>. She provided feedback about the methods while the examiners at my registration viva critiqued the analysis. Subsequent alterations were made for the methods and analysis to be as robust as possible; indeed Stake (1995) suggests that such an approach should be routine. The discussion in this chapter focuses on the refined process; that which was actually carried out and which generated the data presented and discussed in Part III. However, the data produced by Hannah during the pilot phase is contained in the appendix together with a brief commentary of the changes made between the pilot and the main phase (Appendices 8.i, 8.ii and 8.iii).

## 8.3 The rationale for using collages as a method

A favourite phrase of my A level geography teacher when trying to convince the class that it was important to draw quality diagrams was that ‘a picture is worth a thousand words’. He was right. Geography is a very visual subject; many of the concepts are abstract, and displaying them visually can aid understanding. Therefore, it seemed appropriate to engage in research which used created images – collages - to get to the heart of how students represent geographical knowledge.

Research, like the system of education in the UK is dominantly linguistic, relying upon text and language for communication (Atkins and Wallace, 2012). The creation of images

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<sup>88</sup> Hannah had indicated during the piloting of the questionnaire that she would like to be involved in the piloting of the methods used in the main phase. She was a Year 13 student studying geography A level at the time. A pseudonym has been used here to preserve her anonymity and the subsequent data created has not been utilised in any way in this study.

allows students to express themselves in an unconventional way; they are used to writing and speaking so, on a basic level, it can develop students' abilities to communicate. As Hopwood (2012) highlights, it can uncover a different, and sometimes contradictory perspective to one which has been articulated through speech or writing, a sentiment echoed by Eisner (2008). In addition, our sense of sight is entwined with our other senses and often our thoughts are associated with images – they allow connection to the self but also provide distance (Bruner, 1984; Mitchell, 1994). Creating a collage, an image, provides researchers with a window into the lived experiences of students and a means to understand how they make meaning of them (Mayaba and Wood, 2015).

When working with visual data it is important to acknowledge the role it has in representing and disseminating the research but also how it is shaped by and shapes epistemology (Stanczak, 2007). As with other modes of qualitative enquiry the creation of images sits well with a constructivist epistemology that believes there are multiple realities and multiple ways of doing and understanding (Creswell, 2003). Visual data, which unlike written forms tends to be created in a non-linear fashion, often reveals new insights allowing a deeper understanding of phenomena (Davis and Butler-Kisber, 1999; Rose, 2007; Butler-Kisber, 2007). Collage creation, is therefore particularly useful for 'listening visually' and getting into liminal spaces where 'knowledge...never arrives...it is always on the brink' (Neilsen, 2002: 208).

Images are also more likely to be memorable. They can be seen almost instantly and at a glance which means that they are more effective at communicating than text (Harnad, 1991). As the audience for my research is likely to be members of the teaching community being able to convey key messages quickly and efficiently is an important feature. Images are also more likely to elicit an emotional or intellectual response and to make an impact with the person who is viewing them (Goldstein, 2007).

Ethically, visual methods are also a suitable and appropriate when engaging in research with young people. (Morgan *et al.*, 2002; Greene and Hogan, 2005; Thomson, 2008; Mitchell *et al.*, 2011; Tay-Lim and Lim, 2013). They allow 'the voiceless a chance to tell

their own stories' (Finley, 2008: 97) and explore the way in which they have experienced them (Thomson, 2008). Having said this, while images can enable young people to express themselves more readily, in this research with articulate and highly able sixth formers, creating the collage was, for some, challenging.

Bearing these points in mind, I decided that a collage was an essential method for this research. The following instructions were given – firstly in writing a few days prior to the session (Appendix 8.v) and verbally before the student started the task:

**I want you to create a collage on A3 paper. The collage should be based around what you believe geographical knowledge to be. It should be made up mainly of images, which can be drawn or printed<sup>89</sup>. You can have as long as you need to complete it. I will video the process and you are encouraged to talk about what you are doing throughout the process.**

Despite the fact that the instructions given to the students were the same, they approached the task in different ways. Three of them chose to create a mind map rather than a collage as I had intended (see Figure 8.2 for an example). These students seemed more comfortable talking about their views of geographical knowledge rather than representing them as a collage. This may have been due to their lack of confidence in drawing, difficulties experienced in drawing and talking at the same time, choosing not to use printed images or a combination of these. It was interesting that two of these students realised towards the end of the process and were apologetic that they had not followed my instructions. The five students who did create a collage also talked about what they were doing and their view of geographical knowledge but this process was punctuated by periods of silence as they concentrated on creating or positioning the images (see Figure 8.3 for an example). Despite the two different ways in which the task was tackled, the

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<sup>89</sup> I gave students the option to use computers to search for and print off images prior to the session although one was not available during it. Computers can change the way information is presented and measuring the effect of technology on physical representations is challenging (Van Manen and Adams, 2009). However, I wanted students to have the option of using digital images and particularly personal photos as this may be significant to their individual view.

process typically took about the same amount of time. Most students were engaged for between 20 and 30 minutes although one student took just under an hour.

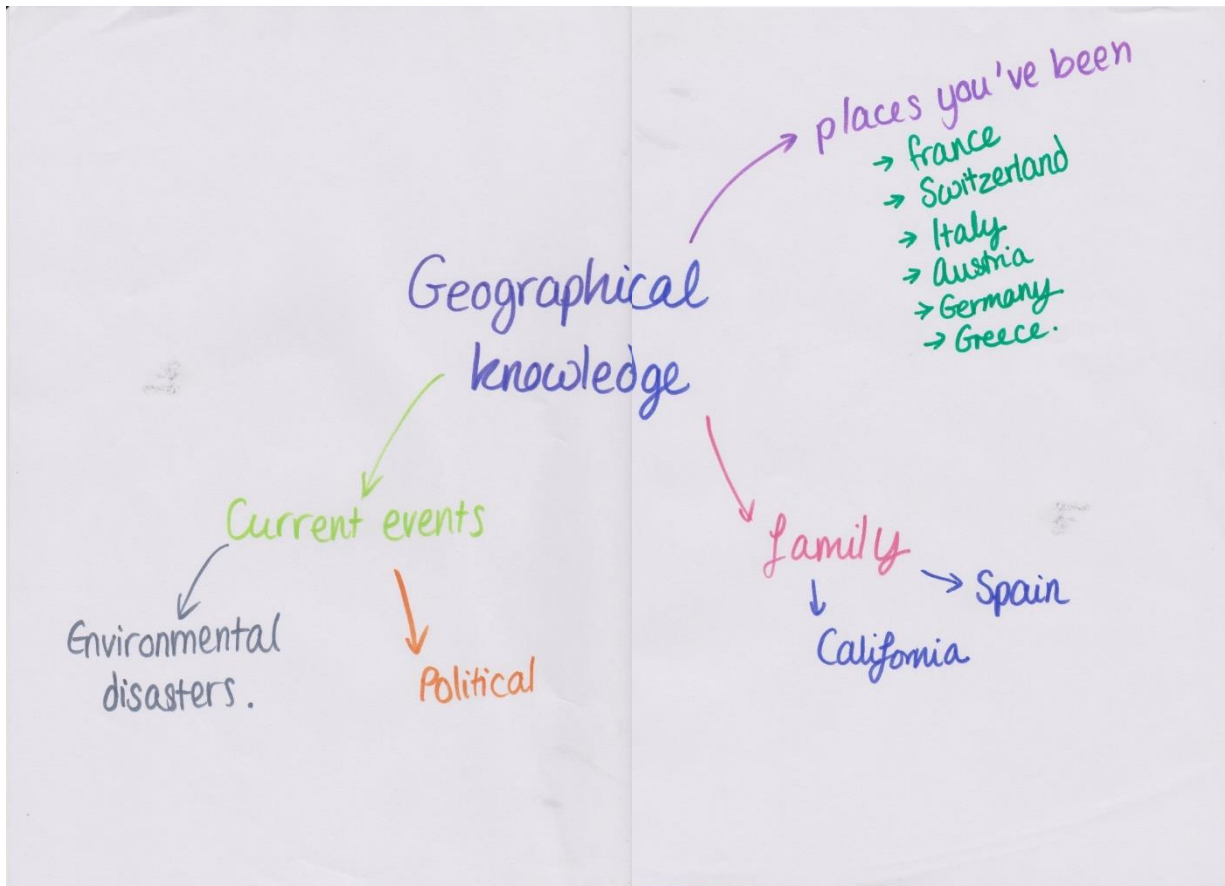


Figure 8.2 An example of a mind map created as part of the collage task



Figure 8.3 An example of a collage created as part of the collage task

## 8.4 Analysing the collages

There were three potential elements in the analysis of this image-based data; firstly, the image itself, secondly the producer and thirdly the viewer (Denscombe, 2010). Given my epistemology it is vital to consider all of these, as the collages produced by the students are open to interpretation. They do not contain a single correct meaning but instead multiple perspectives on something culturally, temporally and socially situated (Stake, 1995; Rose, 2007). Having said this, there might be 'wrong' interpretations, for example if the student had drawn a globe but I had interpreted this as a ball. Therefore, it was the students' description and interpretation of their collages which was most important; it was their voice describing their view which I was particularly looking for.

In analysing the collage itself I firstly used the framework of perspective categorisation theory, described in Chapters 2 and 7. This involved looking at the collage holistically as well as its constituent parts and categorising the dominant perspective from those drawn from the first phase of research; placeist, generalist, interactionist, thematicist or synthesiser. Stake (1995) suggests that categorical aggregation – the drawing of meaning across multiple instances of data – is suitable for instrumental cases and consequently, I also identified the similarities and differences that I noticed between the collages. For example, I looked at whether the images contained photos or diagrams, how they were ordered and arranged and whether any image or theme appeared in more than one collage.

Having undertaken this first stage, I then considered the producer of the collage, the student, at two levels. Firstly, I had videoed the process of them creating the collage along with their commentary and so used the technique of storyboarding to identify key concepts and ordering (Figure 8.4). I could therefore begin to attach the students' meaning to particular images where they had made this explicit. Secondly, I returned to each students' response to their questionnaire to consider their collages in light of their personal characteristics. In particular, I looked for similarities and differences between the collages on ethnic, subject and experiential lines. For example, I looked to see whether students with similar formal experiences of geography – whether they had taken the subject at GCSE, AS or A level – created similar collages.

Finally, I interpreted the images being much more conscious of my own identity, knowledge and observations. For example, I had an insider understanding of the formal curriculum which the students had studied and was able to identify those images that were likely to have come from their formal secondary schooling and those which were likely to have not, even if the students had not made this explicit.

While I describe these three stages in a linear fashion the reality was iterative and there were things I noticed on second, third and subsequent considerations of the images which I had not noticed previously. I am also aware that the interpretation of the data is mine



alone and other viewers may not interpret it in the same way. Consequently, as well as being transparent about the process of analysis I have also included the collages and annotated my observations onto them so that reader can follow my thinking (see Chapter 10).



Figure 8.4 Storyboarding collage creation



## 8.5 The rationale for using critical incident charting as a method

Critical incident charting has been used extensively by Burnard (2011; 2012) as a reflective tool within the context of creativity and the arts. She suggests that this method 'helps our students to examine what shapes them, how bits of their lives link together and how they feel about aspects of their experience that might not normally be accessible' (Burnard, 2011: 178). It therefore seems a highly appropriate method here as a tool for crystallising potentially unconscious ideas and attitudes which have shaped student views of geographical knowledge.

A critical incident does not necessarily have to be either dramatic or obvious, rather they can be relatively commonplace events that occur in the course of everyday life (Tripp, 1993; Tripp, 1994; Angelides, 2001). What is key however, is that significance is given to these events by the student; their criticality is made by the way in which a situation is interpreted. The critical nature of an incident can also only be defined after the event when the consequences are known which makes it suitable for an *ex post* study such as this (Angelides, 2001).

There are clear advantages to using this method in this context as it is flexible and allows the collection of rich data. However, there are also disadvantages. The students may be selective in their recall of events with a bias towards more recent episodes and may be unwilling or unable to describe the event in sufficient detail. They are also making representations in a particular context which is not a naturalistic one. Finally, critical incident charting is just that, a focus on critical incidents. It ignores the everyday messiness and fine-grained nature of reality and provides only partial data.

Three ways of using critical incident charts are identified by Burnard (2012: 170). These are: participant self-report charting in which the participant writes down instances which have influenced the direction of their outlook; interviewer / researcher charting, in which the researcher uses an interview to construct a chart which is then verified and adapted by the interviewee; and interviewee-interviewer charting in which the narrative is co-

constructed around incidents that both believe to be influential. This research adopts the first of these as I wanted my role in the process to be in the background bringing the students' stories to the fore.

The charting of these critical incidents involved the student drawing and annotating a meandering timeline with specific episodes which had influenced the direction of their view regarding geographical knowledge (Appendix 8vi). This can be carried out during interviews or independently on prepared sheets of paper. I did the latter as I wanted the students to be in control of shaping the presentation of their stories and to draw out incidents which could subsequently be discussed during the interview phase. However, feedback from the pilot study suggested a slightly more structured version and therefore, I gave students one of two options. Three of the students chose the version I had originally piloted and created a diagram using the verbal instructions adapted from Burnard (2011: 179):

**Visualise your geographical life as a winding river in which each bend in the river's path marks a critical moment. Think back and reflect on key moments (positive and negative memories) that have influenced the direction of your geographical life. What are the first most significant memories, persons, events or pivotal moments that you recall about your geographical journey. Locate each important episode on a different bend along the length of a winding river where each bend represents a critical moment or turning point. Tell the story (or recall it in your mind) of this important episode. Label the episode. Go on mapping your recollections and chart the complete journey of your geographical life by recalling, listing and labelling each critical incident on each bend.**

The remaining five students preferred the alternative tabular format to organise their thinking where the instructions were written as well as verbalised (Table 8.1). Those who had chosen the table were encouraged to score the impact of each critical incident either positively or negatively and from 1 (virtually no impact) to 10 (very significant impact) which provided a quantitative way of viewing the experiences.



## 8.6 Analysing the critical incident chart

The critical incident chart was primarily used as a stimulus to create individualised questions for the semi-structured interview. This subsequent probing provided detail and began to suggest why the students viewed these particular incidents as critical. However, it was also important to analyse the charts independently of the interviews as these could be triangulated against other methods to see whether representations were consistent (see Section 6.5).

A similar three stage process was adopted here as described in the analysis of the collages (Section 8.4). Perspective influence theory (Figure 2.2) was used to determine which of the incidents originated from formal experiences and which from informal ones. This was more straightforward for the tabular version of the charts as the people involved were often identified within one of the columns. The charts were the only form of representation which had a chronological order, albeit one which was fragmented and disjointed. Therefore, by coding the incidents as formal or informal, a temporal pattern could be identified.

Having used this theoretical framework as a starting point I then compared these findings to the main themes that were drawn out of the collages (see Section 8.4) and interviews (see Section 8.8). Again, I looked particularly for incidents relating to student ethnicity and social status however, references to fieldwork experiences were also noticeable. Finally, I annotated the charts conscious of my identity and role in interpretation (see Chapter 11).

## 8.7 The rationale for using semi-structured interviews as a method

Despite Cohen *et al.* (2000) identifying interviews as having only a supporting role in accessing an individual's viewpoint, in this research they were central and served a dual

purpose. Firstly, they allowed the students to explain the images they used in the collage and expand upon and add detail to the critical incidents identified in their charts; it provided the story behind their representations of geographical knowledge. It also allowed them to account for the option choices that they made, an aspect unlikely to be captured in other methods (Table 6.5). Secondly, it allowed methodological triangulation which is vital in the study of student views of subjects (see Section 6.5). The experience of Hopwood (2004) suggests that different methods should be used to collect similar data as he found that the richness varied between students and methods. Additionally, he found that narratives between tasks were not cohesive and were sometimes contradictory. As I explain in Chapter 6, this is interesting rather than problematic as it allows new knowledge to be discovered.

Undertaking semi-structured interviews with individuals is sometimes considered an easy option, however, here it was selected as a structured interview was too restrictive to unearth the full nature of representations of geographical knowledge and the unstructured approach too free; I wanted the interviews to be responsive to issues raised by the students and their critical incident charts (Wiegand, 1996; Thomas, 2009). Consequently the interview schedule (Figure 8.5) was used and flexibility built in.

Instead of undertaking one interview, Seidman (2006) suggests three interviews should take place to provide context and make the students' experiences more meaningful. The first of the interviews - focused life history - prepares the ground by the interviewer asking the student to tell them as much as possible about themselves in light of the topic. The second – the details of experience – focuses on the detail of the topic, for example here there was be a focus on the detail displayed in both the collage and critical incident chart. Finally, the third – reflection on the meaning – asks students to reflect on past experiences, for example subject choice, and how they have shaped the present. While the pilot interview followed this format it was difficult to arrange three separate interviews in addition to the two sessions where the collage and critical incident charts were created.

### **Introduction for each interview**

- Explain purpose and nature of interview.
- Give assurance that the interviewee will remain anonymous and that responses will be treated in confidence.
- Highlight that the respondent might find some questions difficult, but there are no right or wrong answers. I am only interested in opinions and personal experiences.
- Make clear that the interviewee is free to interrupt, ask for clarification or criticise a line of questioning.
- Ensure that the interviewee knows why I have interest in this area of research.
- Ask permission to record the interview and explain this is for ease of transcription.

### **Interview 1: Focused life history**

*How did the participant come make the choices she did at GCSE and A level? A review of the participant's life history to the time when she chose her options.*

- Can you describe your primary school experiences of geography? Did you enjoy geography at primary school? Why do you think this is?
- Can you describe your secondary school experiences of geography? Did you / do you enjoy geography at secondary school? Why do you think this is?
- How easy or difficult did you find it to choose your GCSE / A level options? Why did you / didn't you choose geography at GCSE / A level?
- If you could make your choices at GCSE / A level again would you change anything? Why do you think this?

### **Interview 2: Contemporary experience**

*What is the participant's perception of geographical knowledge?*

- What images have you included in your collage? Is there anything you would add or remove? Why have you included those images? Which image do you think is most important?
- Do the topics that you study / have studied fit with your idea of geographical knowledge? Are there any that don't fit?
- Which topics do you think should definitely be studied within geography? Are these specific to particular key stages or phases of education?
- Where do you think your view of geographical knowledge has come from?
- What critical incidents have you included in your critical incident chart? Can you describe these in detail? Why did they have such an effect on your perspective?
- Is having geographical knowledge important to you?
- What is your attitude to geography fieldwork? What experiences of fieldwork have you had? Did you enjoy them / find them useful? Why?
- What is your attitude to geographical skills e.g. map skills? What experiences of these skills have you had? Do you enjoy them / find them useful? Why?

### **Interview 3: Reflection on meaning**

*What does geography mean to the participant? Given what the participant has said in interviews 1 and 2, how does she make sense of her option choices?*

- What influence do you think each of the following has had on your perceptions of geographical knowledge and your option choices: teachers; family; yourself; friends; potential career; enjoyment; media; reading; other subjects.
- Did you make your choices for other subjects in a similar way to your choices to take / not take geography? Why was this?
- Do you see geography as being part of your identity in any way? Why do you think this is?
- How do you see your relationship with geographical knowledge developing in the future? Do you think it will become more / less important?

*Figure 8.5 The schedule for interview (After: Seidman, 2006: 17 – 19)*

Therefore, for pragmatic reasons this three stage interview was conducted in one extended session. For most students this took between an hour and an hour and a half, although one student was interviewed for just under two hours (Appendix 8.vii).

## 8.8 Analysing the interviews

The transcription of the eight interviews was the first stage in the process of data analysis; although as Colley (2010) explains, separating out data gathering from analysis is artificial and Miles *et al.* (2014) strongly advise carrying out both concurrently. I was determined to do this myself, partly because I wanted control over a process with huge potential for data loss (Kvale, 1996; Cohen *et al.*, 2000) and partly because it provided the opportunity for preliminary engagement with the data. A transcription protocol was developed (Appendix 8.viii) so that the interviews could be dealt with consistently. The process took several months longer than I had anticipated, mainly because I was concerned with transcribing as much detail as possible.

Having completed this process I then started the first phase of coding which was initially deductive (Saldaña, 2013). There were three theories which I had mobilised from Part I – perspective categorisation theory, perspective influence theory and subject choice theory – and the codes suggested from these were straightforward to create (Table 8.2). As I went through this process other inductive codes started to emerge from the data and were added to the coding structure. Following this, I then engaged in a second phase of coding which was more fine-grained. Essentially I divided the first layer of codes into several categories; a process which was predominantly inductive<sup>90</sup>.

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<sup>90</sup> In Table 8.2, codes that emerged inductively from the data are highlighted in yellow.

Table 8.2 The coding structure for the interviews

CATEGORY: PERSPECTIVE CATEGORISATION	ABBREVIATION: PC
PC: PLACEIST - local / national / global	PC: PLA - loc / nat / glo
PC: GENERALIST - general knowledge	PC: GEN - kno
PC: INTERACTIONIST - links	PC: INT - lin
PC: THEMATICIST - physical / human / topics	PC: THE - phy / hum / top
PC: SYNTHESISER - science / world development / other	PC: SYN - sci / wde / oth
<b>PC: FIELDWORK</b>	PC: FIE
<b>PC: SKILLS</b> – maps / DofE	PC: SKI – map / doe
CATEGORY: PERSPECTIVE INFLUENCE	ABBREVIATION: PI
PI: PRIMARY TEACHER – teacher / activity	PI: PRI – tea / act
PI: SECONDARY TEACHER – teacher / activity / (KS3 / KS4 / KS5)	PI: SEC – tea3 / act3 / tea4 / act4 / tea5 / act5
PI: PARENTS – career / information / opinion (Mother / Father)	PI: PAR – mcar / minf / mopi / fcar / finf / fopi
PI: SIBLINGS	PI: SIB
PI: FRIENDS	PI: FRI
PI: TRAVEL – holiday / school trips	PI: TRA – hol / str
PI: MEDIA – television / videos / newspapers / radio	PI: MED – tel / vid / new / rad
<b>PI: SOCIETY</b> – subject hierarchy / grammar	PI: SOC – sub / gra
CATEGORY: SUBJECT CHOICE	ABBREVIATION: SC
SC: ENJOYMENT – content / activity	SC: ENJ – con / act
SC: ABILITY – grades / skills	SC: ABI – gra / ski
SC: USEFULNESS – career / university	SC: USE – car / uni
SC: FAMILY – advice / career	SC: FAM – adv / car
SC: TEACHERS – advice / enjoyment	SC: TEA – adv / enj
<b>SC: EFFORT</b>	SC: EFF
<b>SC: RISK</b> – new subjects	SC: RIS - new
<b>SC: CHALLENGE</b>	SC: CHA
CATEGORY: INTERSECTIONALITY	ABBREVIATION: I
I: GENDER – informs / intersects	I: GEN – inf / int
I: CLASS – informs / intersects	I: CLA – inf / int
I: ETHNICITY – informs / intersects	I: ETH – inf / int
I: ABILITY – informs / intersects	I: ABI – inf / int



Coding for the over-arching lens of intersectionality was more challenging. Due to the fact that an intersectional approach attempts to capture multiple aspects of identity, researchers often employ analysis which is multi-stage (Hankivsky and Grace, 2014). I decided to follow the example of Bilge (2009) and engage in a two-stage hybrid approach which was firstly inductive, open and axial, identifying emergent themes according to the different facets of identity, and secondly deductive to identify how particular social categories intersect (Table 8.2). While this two-layer approach to coding appears complex, its purpose was to make visible factors that shape experience which are often hidden or overlooked (Hunting, 2014). An example of this coding protocol in practice can be seen in Figure 8.6 and Appendix 8.ix, while examples from the interviews for each of the codes is found in Appendix 8.x.

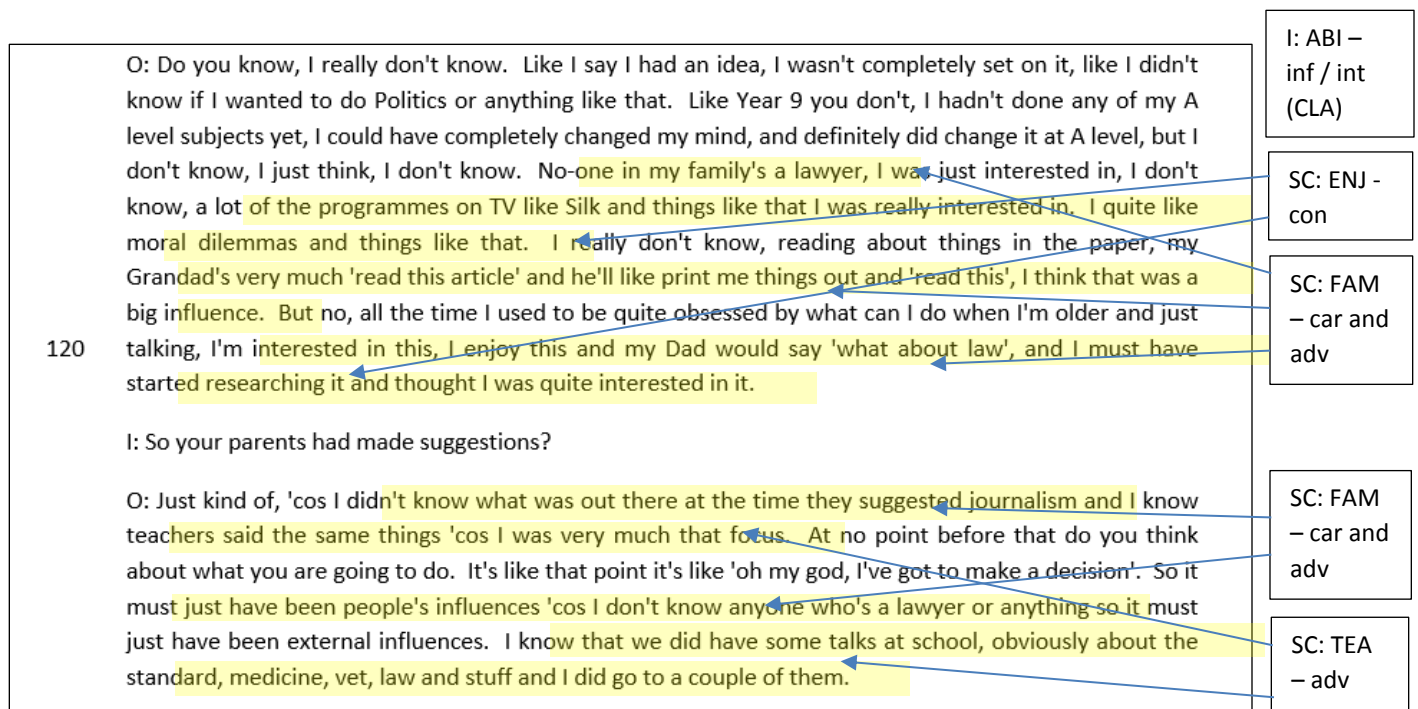


Figure 8.6 Interview coding in practice: Olivia's interview

At the outset I determined that Computer Assisted Qualitative Data Analysis (CAQDAS) software, specifically NVivo, would be used to analyse the interviews as the data corpus would make manual analysis difficult (Kelle, 1995). However, this proved impractical. The software was freely available at the Faculty of Education but, as a part-time student

living some distance away, it was difficult for me to access and expensive to invest in a personal copy. I also felt more comfortable using post-it notes, highlighters and Microsoft Word (a programme with which I was familiar) as this allowed me to physically interact with the data and I was able to do much of the coding on long train journeys which I took regularly for work.

## 8.9 Engaging in observation

Both Stake (1995) and Cohen *et al.* (2000) put observation at the heart of case study and identify two prominent types – that of participant, where observers engage in the activities being observed and non-participant, where observers are outside the group they are observing. As a researching professional rather than a professional researcher, I was an insider within the setting, engaging in research which had no discernible beginning. I was continually engaged in participant observation, in both the classroom and the school, which was naturalistic and unstructured (Morrison, 1993). Throughout the course of the research, observations were recorded in my field notes. They included descriptions of events, students, physical settings and behaviour as well as reconstructions of conversations which were driven by my research interests (LeCompte and Preissle, 1993).

## 8.10 Conclusion

Clearly, with a constructivist epistemology which orientates and informs this case study research, ‘there is no objective truth to be known’ (Hugly and Sayward, 1987: 278) (see Section 6.3). Indeed, as Stake explains, ‘there are multiple perspectives or views of the case that need to be represented, but there is no way to establish beyond contention, the best view’ (1995: 108). A single method only provides a one dimensional view and thus engaging in multiple methods facilitates a more rounded perspective which deepens

understanding (see Section 6.5). By being open and transparent about my decisions regarding my chosen methods and the way in which the data has been analysed I have gone some way to establishing its integrity. In addition, rather than use triangulation as a tactic to validate I have instead, as Miles *et al.* (2014) suggest, naturally built in these ideas as a way of doing research; I have self-consciously double-checked my data and findings and used multiple sources of evidence from several different perspectives. Arguably, the verification process is hard-wired into the data collection because of the way in which I have designed my study. Additionally, while corroboration from these different methods of triangulation enhances the trustworthiness of the data, Miles *et al.* (2014) suggest that resulting inconsistent or conflicting findings are not necessarily problematic. Indeed, these discrepancies are instead productive as they have encouraged me to look closely at my methods and forced me to explain why they exist (see Chapters 10, 11 and 12).

## Chapter 9

### Students as researchers: taking another step back

#### 9.1 Introduction

Reflexive researchers are encouraged by Bourdieu (1990) to cognitively take two steps back from the research process; the first to understand the big picture of the phenomena that is occurring and the second for the researcher to step back from themselves (Maton, 2003; Ryan, 2004; Connolly, 2008). However, I would argue that in research with students there needs to be a third step back; one in which the adult researcher begins to relinquish control over the research so that students can begin to make meaning and provide a different perspective. This serves not only to empower those who are being researched but also allows the researcher to explore their own identity (Edmond, 2005; Degotardi, 2011).

Participatory research, which encourages this third step, has been part of the interpretivist tradition since the 1960s and arose from a critique of traditional evaluative research (Byers, 2014). The emancipatory research which emerged engaged marginal groups as researchers with the goal of improving their own lives (Oliver, 1997; Kemmis, 2001). However, this proved a challenging ideal and so participatory research became a compromise whereby marginal groups were involved in the research to some degree (Byers, 2014). Given this turbulent history the term 'participatory research' has different meanings dependent upon the context in which it is used (Cornwall and Jewkes, 1995; Kemmis and McTaggart, 2005). In education, legislation<sup>91</sup> and policy have encouraged initiatives which listen to children's voices and this has provided impetus to the developing field of student voice research (McIntyre *et al.*, 2005; Noyes, 2005; Flutter, 2007; Ravet,

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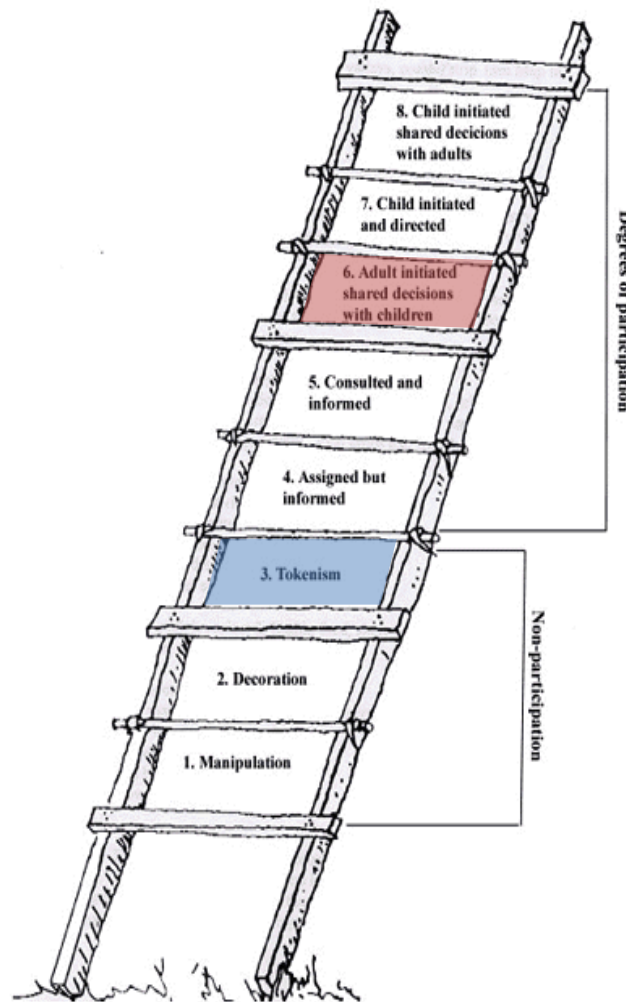
<sup>91</sup> The United Nations Convention on the Rights of the Child (UNCRC) (1989) was a catalyst for change as the charter demanded that children were listened to and consulted on matters that affected their lives. The UK government put forward a green paper '*Every Child Matters*' in 2003 which was followed in 2004 with legislation in the form of the 2004 Children's Act to embed these principles (Ravet, 2007; Kellett, 2010).

2007; Whitty and Wisby, 2007; Lewis and Porter, 2007). However, even though this field is arguably participatory – research is conducted with students rather than on them - adults remain the driving force and key decision makers. Instead, I favour the approach taken by Kellett who argues for research by children which empowers them to set their own agendas. She suggests that as well as being characteristically different from adult-child research, child-child research generates different data. Children have an insider perspective on childhood which adults are unable to access and therefore this type of research has the potential to develop new knowledge regarding children's lived experience (2005a: 22). This chapter then details how students as researchers (SaRs) have worked in parallel with me on this research.

The decision to further complicate my thesis by engaging in participatory approaches and introducing another set of voices was not one which was taken lightly. Therefore, in Section 9.2 I use Hart's ladder of participation (1997) to justify this decision. Sections 9.3 and 9.4 then detail the process of student training and research from my perspective. While this is not ideal – I would have preferred these sections to be in the words of the students themselves – these sections are designed to reassure the reader that the process was robust and rigorous. I explain in detail how the SaRs were trained to be transparent and also highlight how their research fits with my own. The ethical dilemmas which arose are also considered and, within the conclusion, I am both explicit and realistic about the problems of engaging SaRs within the context of this research.

## 9.2 The justification for engaging students as researchers

A framework to illustrate the different degrees of student participation when working with adults has been developed by Hart (1997) who uses a ladder as a metaphor (Figure 9.1). Although this has been criticised, not least by Hart himself, as too simplistic and linear a model for such a complex issue, it does provide a useful starting point for considering students' formal participation in programmes such as SaRs (Hart, 2008).



*Figure 9.1 The ladder of participation (After: Hart, 1997: 41)*

Hart (1997) states that the first three rungs are unacceptable and yet this is the domain where my Masters research resided (shown in blue). I appreciate now that this research was tokenistic; I was concerned about giving students a voice yet they had no choice about the subject which was being researched nor time to formulate their opinions. I resolved that this research would transform the way in which students participated to make it genuine; I would push them up the ladder. However, aspiring to the highest reaches of the ladder raised a number of issues. Ultimately, this is my doctoral research and if I handed it wholesale over to the students I would lose ownership. I was also concerned that if the student initiated research went wrong or failed to produce any

workable data, I would be without a thesis; the stakes were too high. I was fortunate to discuss these concerns with Ros Frost, a doctoral student with experience in engaging students as researchers (Frost, 2007; Frost, 2008; Frost and Holden, 2008). She suggested a two-pronged methodology; one strand teacher-researcher (detailed in Chapters 6, 7 and 8), the other student-researcher. This enabled me to move up the ladder of participation without compromising my research objectives; if the student research worked, it could be incorporated as a different perspective on the same issue thus adding another dimension to the findings, if not, the research was still robust and valuable, even with the student perspective removed.

I show this new position in Figure 9.1 (in pink) where, despite the research being adult initiated, the decisions are shared with children. Hart (1997) argues that, to achieve this in reality, children must be involved at all stages of the process from planning to dissemination. Even though the participants in the SaRs programme did not have a voice in determining the issue to be investigated as this had arisen from my own practice, they were party to the decisions I had made (Appendix 9.iv). From this base they then drove the research at all stages thereby moving beyond the tokenistic and towards the higher reaches of the ladder.

### 9.3 The students as researchers training programme

Between September 2013 and July 2014 I organised a weekly lunchtime club for Year 9 students to train them as researchers<sup>92</sup>. 21 students opted into the programme at the start, of which between 12 and 15 regularly attended, and as part of the programme they carried out a research project in an area of interest to them (Appendix 9i and 9ii).

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<sup>92</sup> Discussions with the Pastoral Deputy Head suggested that this year group was optimum as there are links with key themes within the Year 9 PSHE (Personal, Social and Health Education) curriculum regarding option choices and careers which brings potential benefits to the students (see Chapter 6 and Appendix 6.i for a full discussion of research ethics).

Participatory research within education has been focused around the work of the Children's Research Centre (CRC) which was established at the Open University in 2004 with priorities focused upon developing resources to support children as researchers and to evaluate the benefits of children's research (CRC, 2013). I contacted the director of the centre, Cindy Kerawalla, for advice. She suggested I use Kellett (2005b) as a starting point for developing training resources and provided access to the MyShout website, developed specifically for the purpose of training students to be researchers (Figure 9.2). As the first group to use the website without input from anyone at the centre, Cindy was also keen for feedback regarding its efficacy<sup>93</sup>.

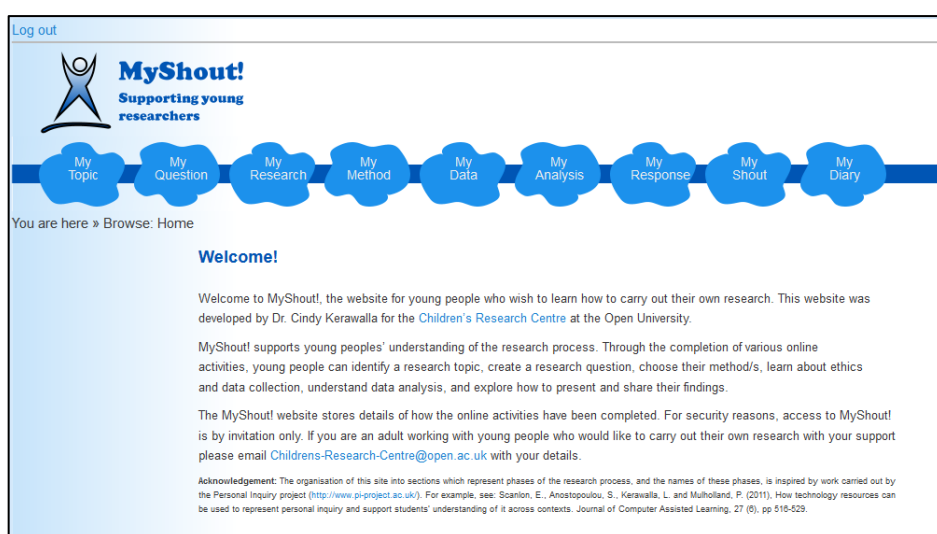


Figure 9.2 The home page of the MyShout website<sup>94</sup>

I anticipated finished research articles by December 2013 so I would have a trained group of students who had set out their methods for inclusion in my registration portfolio (July 2014), but this timescale proved unrealistic. However, I resolved that it was better to ensure the students were properly trained and could demonstrate readiness for carrying out the research rather than to rush them through this process (Schafer, 2012). There

<sup>93</sup> Despite producing a variety of resources based around Kellett (2005b) and the first two training sessions being highly structured, once the students started on their research projects and were all working at different stages it was more effective for them to use the MyShout website and to work independently and at their own pace.

<sup>94</sup> <http://www.open.ac.uk/researchprojects/childrens-research-centre/crc-projects/myshout> (accessed 9th December 2016).



was also the issue of whether it was ethical to allow students to carry out research which brought ethnicity to the fore and which encouraged a compartmentalisation of their peers<sup>95</sup> within ethnic categories, which required time, thought and reading to consider.

Here, I turned to geographical rather than educational literature, as participatory research in the former arose out of a need to study the developing world and refugee children differently and is more explicit regarding issues of ethnicity and ethics (Kesby *et al.*, 2005). I found examples of researchers who engaged with street-children but were uncomfortable using this negative and stigmatising categorisation. Their responses to this ethical dilemma were different; Abebe (2009) chose to shift his focus so categorisation was unnecessary, while Jabeen (2009) used a broad definition with qualifiers with which the children identified. Taking these responses into account I identified and discussed my three options with the Deputy Head before settling on the third of these (Table 9.1).

*Table 9.1 Addressing ethical concerns of SaRs researching their peers.*

Option	My response	Response from the school
<i>SaRs research views of geographical knowledge and / or option choices with no reference to ethnicity (see Abebe, 2009).</i>	Ethically, this is probably the best option as both geographical knowledge and option choices are not controversial topics of investigation. However, it is unlikely to produce data which would provide an alternative perspective to my research as the focus on ethnicity is absent. This is possibly too much of a shift.	The third of these options seems the best in that it is ethically better than option 2 and yet will allow you to collect the information you need for your study.
<i>SaRs research views of geographical knowledge and / or option choices with no reference to ethnicity. I subsequently analyse the data with reference to ethnicity using information about participants held on SIMS.</i>	Ethically, I am uncomfortable with this option. While it would produce data which would allow an alternative perspective to my research, the SaRs would not be party to the data analysis. This is not empowering for the SaRs and also I am uncomfortable with the covert nature of allocating ethnicity to the participants without discussion.	I think you need to be careful that your SaRs don't categorise their peers in any way at any stage of the process. Have you considered how the SaRs will analyse their collected data without categories?
<i>SaRs research views of geographical knowledge and / or option choices. Participants describe characteristics of their own identity (which may or may not be ethnically based) at the outset and on their own terms (see Jabeen, 2009).</i>	This is my preferred option. SaRs are able to research perceptions of geographical knowledge and option choices which are not controversial. However, the focus on identity is not lost. There is a chance that participants will not refer to their ethnicity in the description of their identity. However SaRs will be able to be involved in the analysis and the findings are likely to provide an alternative perspective to my research.	<b>My response</b>  I think this could result in some new and interesting ways of analysing and presenting the data. SaRs will be able to refer to their peers identities without necessarily classifying them.

<sup>95</sup> The SaRs were in Year 10 when they carried out their research and chose to investigate the opinions of their peers.

## 9.4 Engaging students as researchers in doctoral research

Having trained the students as researchers I then invited all those who had completed projects in this phase to be part of my doctoral research (Appendix 9.iii). Five students agreed to work on this project and attended the first meeting (Appendix 9.iv). I was aware that I had to achieve a fine balance between giving the students autonomy to make their own decisions and trying to guide them in such a way that their research would be valuable for inclusion in my thesis. Therefore, I decided to start the process by explaining the context of my own research strand and by suggesting the central concepts of ethnicity, geography and subject choice which I hoped would be reflected in theirs. I also built in a period of reflection between each meeting so I could consider the best way to move the projects forward without compromising my objectives.

During the first meeting the students spent time mind-mapping their ideas around the concepts (Figure 9.3).

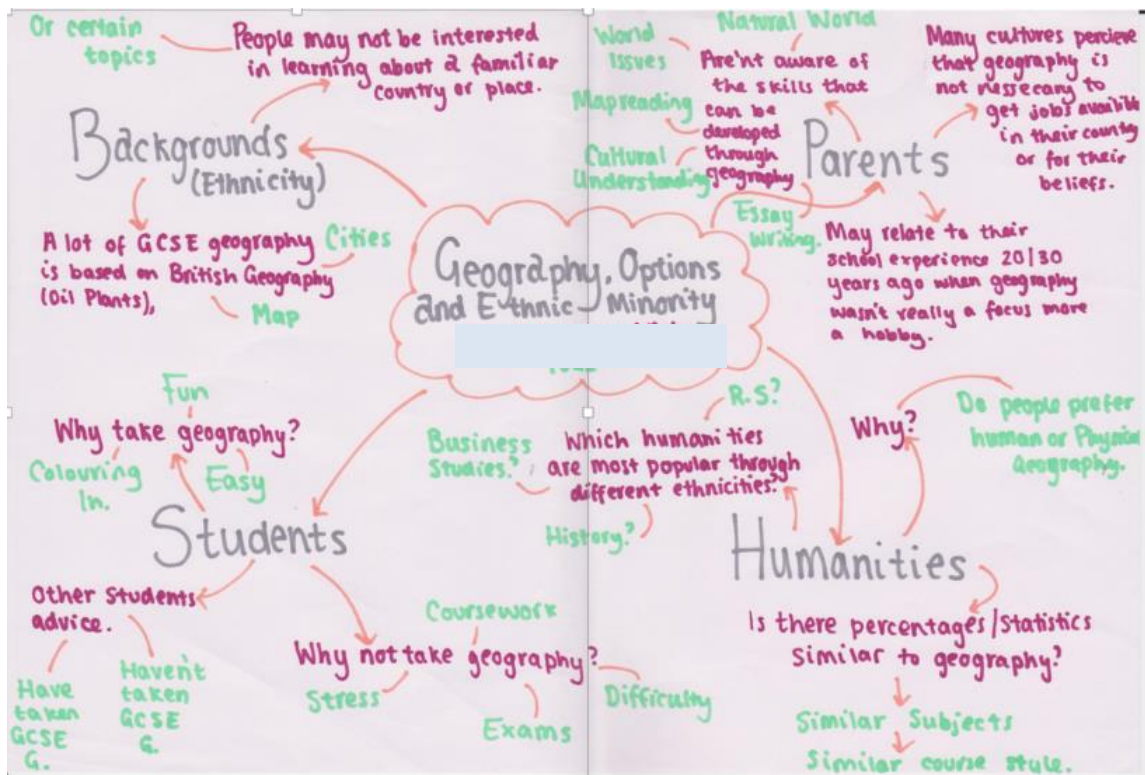


Figure 9.3 The first stage of planning: developing a SaRs research focus.

There were five potential research questions that emerged from the students' planning:

- What influence do parents have on pupils'<sup>96</sup> choice of GCSE options?
- How does the uptake of geography at Claytons by students of different ethnicities compare with schools in M\_\_\_\_\_ and D\_\_\_\_\_ (nearby towns)?
- How does the uptake of geography by different ethnicities compare to RS, history and Business Studies?
- What factors influence students' choices in the uptake of GCSE geography?
- Is ethnicity an important factor in the choosing of GCSE options?

The students decided that they would split themselves into two groups so that they could investigate more than one of these questions; Amy, Tara and Adele<sup>97</sup> chose to focus on question a) while Jane and Rachel chose b).

Having decided upon their over-arching research questions, the second meeting was spent developing a research strategy which specifically considered the methods that might be used (Appendix 9.v). However, it soon became clear that an investigation of question b) was going to be logistically and ethically difficult; it would require the collection of sensitive data on ethnicity from a number of schools who either might not have the data to hand or be in a position to share it. Rather than vetoing this investigation outright I posed a series of questions to the students which encouraged them to consider their plans in more detail. They also went away and tried to collect some initial data via school internet pages and, finding it very difficult to get the information they wanted, quickly came to the same conclusions that I had. They subsequently decided to change their research focus to question d) above.

The students then spent two months collecting, presenting and analysing their data. There was much discussion about the methods they would use and also who they would

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<sup>96</sup> Some of the students as researchers used the term 'pupils' while others used 'students'. It is for this reason that the terminology is not consistent within these questions.

<sup>97</sup> In the same way that pseudonyms have been adopted for the eight case study students in the teacher-researcher strand so I have also given the students involved in the SaRs project names to give them anonymity.

approach. To mirror my research strand it would have been helpful if they had canvassed sixth form students. However, the Year 10 SaRs were apprehensive about approaching older students who they did not know and felt much more comfortable talking to their friends and peers. Also, despite wanting to conduct interviews at the beginning of the process the students were constrained by both time and their other GCSE studies and so both groups carried out questionnaires to collect their data (Appendix 9.vi and 9.vii). Amy, Tara and Adele who were investigating the influence of parents on GCSE choices received completed questionnaires from 61 students while Jane and Rachel whose research focused on the factors contributing to students choosing geography for GCSE received 69. Their data and analysis was presented in two written reports which have been incorporated into the discussion and findings in Chapter 12.

## 9.5 Conclusion

The grand plans that I had at the outset for having a substantial student-researcher strand running parallel to my teacher-researcher strand did not quite materialise. I initially envisaged the co-production of knowledge by myself (as academic researcher) and (non-academic) groups of students as a conversation (Reason and Bradbury, 2001; Schurr and Segebart, 2012). I was keen to use this conversation to re-adjust the relationship of power between researcher and researched but, in the event, the tensions surrounding my need to be authentic but also to remain in control of the research were perhaps too great (Guijt and Shah, 1998). In addition, the data collected by the students, while useful and interesting, did not have the same richness as the data that I had collected and did not neatly intersect with my entire study. Neither project tackled my first or second research question although they both dove-tailed neatly with my third.

Despite this, I am convinced that including students as participants within this research, albeit in a reduced capacity, was the right decision. It added another layer of complexity to my thesis but also served to add another dimension to my findings regarding students' option choices which I detail in Chapter 12. The students enjoyed their involvement and

were able to present their findings to a small group of teachers as part of the staff development 'learning lunch' programme. Above all, it satisfied my need to shift the focus of this research from that which is done to students to that which involves them as participants. I am satisfied that this has been done authentically and ethically and it makes my thesis richer and more robust as a result.

## Conclusion to Part II

The focus of this research, the students, their lives, representations and choices, is complex and this is mirrored in the methodological decisions I have made. The two-strand, two-phase structure is designed to shine a light on the students from a range of angles which in turn, creates multiple rich and detailed stories. Coupled with this, I have been transparent about the methodological decisions I have made and critiqued them fully. I am aware that all methods, methodologies and theoretical perspectives have their limitations and have not shied away from highlighting these. How else is the reader to make up their mind about the trustworthiness of this research if they only have partial information? The quality of the findings that follow in Part III can only be as good as the quality of the data on which they are based; I believe that throughout this part I have made the case for this quality foundation convincingly.

PART III  
FINDINGS AND DISCUSSION

## Introduction to part III

The interpretative approach I have taken is cyclic rather than linear, so the findings presented in Part III are integrated within the analysis and discussion so ideas are linked rather than considered in isolation (Thomas, 2009). However, to make sense of the quantity of data collected, a model for analysis was chosen which focused on the underpinning research questions. This part is therefore broken down into chapters which follow this structure (Blaxter *et al.*, 2002). This is problematic in that many of the stories weave around and between the research questions. However, this structure does provide a manageable way of organising the findings and enables all sources of data to be considered.

As discussed in Part II, the data was initially deductively coded and analysed using three theoretical frameworks which here inform and shape each chapter in Part III. Perspective categorisation theory, initially put forward by Walford (1996), used in a different context by Catling (2004) and modified inductively from the questionnaires in this study (Chapter 7) is used to structure the findings and discussion in Chapter 10. Chapter 11 is shaped by perspective influence theory; the academic and ethnogeographic influences on students' views of geography suggested by Martin (2005; 2006; 2008) and developed in diagrammatic form by Kitchen (2013) (Chapter 2). The third chapter in this part, Chapter 12, uses subject choice theory, factors identified as being important by Adey and Biddulph (2001) and Ferretti (2007) in previous studies of students' subject choices post-14, as its underlying structure (Chapter 5). However, while these theories each provide a foundation and structure to each chapter, the theoretical lens of intersectionality outlined in Chapter 3, is mobilised to bring coherence to the whole part and to highlight the multi-dimensional and complex nature of the students' stories. While it appears throughout the three chapters, its usefulness in the context of this research is crystallised in the conclusion to this part. The weaving of theory and theories can be shown by revisiting the diagram, Figure iii.1.





*Figure iii.1. The golden thread – Part III: Findings and Discussion.*

In addition, the substantive literature discussed in Part I is woven throughout the chapters in this part. The two articles detailed in Chapter 4 are also compared and contrasted in light of my findings. Chapter 10 incorporates Israeli students' perceptions of geography instruction goals (Bar-Gal and Sofer, 2010) and the article 'History, memory cultures and meaning in the classroom' is considered in Chapter 11 (Hawkey and Prior, 2011).

While the research questions and theory provide the framework, at the heart of this thesis are the stories of the students. I have been privileged to spend many hours speaking

with them, observing them and analysing their stories and this puts me in a unique position. The chapters which make up Part III offer the reader an opportunity to follow my analysis and presentation of findings. However, before the reader engages with this section it is important that they are aware of the double layer of interpretation which is an intrinsic feature of this interpretivist study. As Lincoln and Guba comment, 'data are, so to speak, constructions offered by or in the sources; data analysis leads to a reconstruction of those constructions' (1985: 332). Following on from this, while I have used the research questions, theoretical frameworks and literature outlined above as an organisational structure, I have made decisions, which others may or may not agree with, about the significance of the data and its consequent inclusion or exclusion.

Due to the fact that the voices of the students are so central to these chapters I will take the opportunity here to briefly introduce each of the eight students involved in the second research phase. Table iii.1 introduces the students and begins to provide some detail regarding their ethnicity, A level choices and formal experiences of geography while Table iii.2 provides an opportunity for the reader to engage with the students' initial written statements regarding geographical knowledge which appeared on their questionnaires (Chapter 7). Within this table I have justified my classification of these statements to be transparent about the decisions I have made. Throughout this section the descriptions are mainly mine and are functional rather than personal. However, it is hoped that in providing this information the reader may better understand the students' context and situate their stories.

There are clear differences shown in Table iii.1 between the students both in terms of their ethnicity and their formal experiences of geography; six different ethnic groups and four different experiences from KS3 to A level are represented. These differences were intentional and designed into the research process when the students were selected (Chapter 7).

*Table iii.1. Introducing the eight case study students*

<b>Pseudonym<sup>98</sup></b>	<b>Year</b>	<b>School year started Claytons<sup>99</sup></b>	<b>Stated ethnicity<sup>100</sup></b>	<b>AS / A levels</b>	<b>Formal experience of geography</b>
Marie	13	7	Other White	music, chemistry, physics, maths and Further Maths	GCSE
Naomi	13	7	White British	biology, chemistry, German, maths and Latin	GCSE
Olivia	13	7	White British	English Literature, politics, World Development, history and French	KS3
Philippa	13	12	White British	biology, chemistry, physics and Latin	AS level
Qabilah	12	8	Bangladeshi	English Literature, politics, Religious Studies, geography and history	AS level
Rosie	12	7	Chinese	biology, chemistry, physics, maths, Further Maths and Mandarin Chinese	GCSE
Sabah	12	7	Pakistani	biology, chemistry, Religious Studies, maths and Critical Thinking	KS3
Tabitha	13	7	White and Asian	biology, chemistry, World Development, geography, French and Extended Project Qualification (EPQ)	A level

However, there are also similarities surrounding A level choice and perspective categorisation which were perhaps less intentional. Science and maths were popular in the A levels chosen by these students; six of the students were studying at least two (out of biology, chemistry, physics, maths and further maths) while four had selected at least three of these subjects for advanced study. In addition, five of the eight students were

<sup>98</sup> The students were encouraged to choose their own pseudonym although, with the exception of Philippa, they declined to do so. Pseudonyms were therefore chosen for the students. This process is discussed more fully in Chapter 6.

<sup>99</sup> While six of the eight students started Claytons in Year 7, Qabilah started in Year 8 having completed Year 7 in a local comprehensive school and Philippa was home educated by her parents until she started at Claytons in Year 12.

<sup>100</sup> The students categorised their ethnicity on the questionnaire in the first phase of research (Appendix 7.iii). The categories from which students could choose were the same as those which appear on the student data sheets used at Claytons.

categorised as thematicists using perspective categorisation theory, the justification for which can be seen in Table iii.2.

Table iii.2 Justifying the initial categorisation of the students' written statements

Pseudonym	Initial statement from questionnaire defining what students understand by the term 'geographical knowledge'	Initial categorisation using perception categorisation theory	Justification for categorisation
Marie	Being able to identify and explain <b>geographical landforms (like spits, bars)</b> . For examples, they can say <b>how</b> something is formed. This includes <b>human geography</b> as with 'geographical knowledge' someone may be able to find the root cause of why there are so many living in <b>slums</b> .	Thematicist	<i>Divides geography into human and physical components. Gives examples of different concepts which could be included in each e.g. spits, bars, slums.</i>
Naomi	Understanding the world knowing about <b>human and environmental aspects of the world</b> and the effect they have. It also encompasses the way the world is changing; both scientifically and socially.	Thematicist	<i>Divides geography into human and environmental (natural?) components. Identifies change over time.</i>
Olivia	The understanding of the world, whether that be in terms of its physical nature, population diversity or <b>relationships between countries</b> . This could also be in the form of understanding measurements of geographical aspects, relating <b>knowledge to maps</b> or diagrams, or considering <b>the development of a particular area</b> .	Placeist	<i>Hint at thematicist in the first sentence but second half focuses on countries, maps and the characteristics of particular places e.g. development.</i>
Philippa	Certain <b>facts, rules and principles</b> which have been discovered, acquired or observed to do with the <b>physical make-up of the world</b> , its atmosphere and inhabitation in relation to one another, often revealing repeating trends and patterns which follow these rules and continue in cycles.	Thematicist	<i>Only really focuses on physical geography although human is hinted at. Positivist terms used e.g. rules, principles, facts etc.</i>
Qabilah	Divided into the <b>knowledge of physical processes</b> which are apparent in the world as well as the <b>study of humans and patterns</b> that occur within the past as well as the present. For example, geography covers <b>geology, demographic changes / patterns, rivers, oceanology</b> etc.	Thematicist	<i>Divides geography into human and physical components. Highlights specific topics which fall into each category.</i>
Rosie	The physical land mass; and their political borders; the physical landscape and how / if political borders have any correlation to <b>how countries are divided</b> (i.e. a river may separate two countries, or why the <b>US</b> has straight state borders).	Placeist	<i>Geopolitical focus which highlights how places (specifically countries) are constructed in relation to physical geography. US mentioned.</i>
Sabah	<b>Human and physical geography</b> contribute to a wider knowledge of society.	Thematicist	<i>Divides geography in human and physical components. Simplistic.</i>
Tabitha	The understanding of natural processes in the world, but also <b>how human populations function and interact with the world</b> . Simply, it is the knowledge of <b>how landforms are formed</b> , or what influences <b>population change</b> , for example.	Interactionist	<i>Focus on how the natural and human environments interact. However, examples given are thematic.</i>

## Chapter 10

# How do students of different ethnicities represent geographical knowledge?

### 10.1 Introduction

Before embarking upon an exploration of how students of different ethnicities represent geographical knowledge, it is worth clarifying both what this chapter is and what it is not. Primarily, it is not an attempt to develop a typology of students of different ethnicities and their particular representations. Such an approach would strip out the rich detail inherent in the students' descriptions and compartmentalise their view of geographical knowledge in a singular context and as I see it. It would also require more students. It might also encourage the reader to generalise regarding individual ethnicities and particular representations of geographical knowledge which is not my intention and would be at odds with the epistemology and spirit of this research. Yet, I have already engaged perspective categorisation theory to categorise responses to the questionnaire during the first phase of this research (Chapter 7 and Table iii.2) and my analysis of student interviews also used this as a coding structure (Chapter 8). This approach raised interesting questions including whether or not the students' initial statement mirrored their representation of geographical knowledge presented in the collage and interview. It also started to consider what a rich and detailed description of this representation might look like. Should I move away from tackling such questions because to do so serves to essentialise the students' representations? In grappling with this dilemma I chose to be pragmatic. I chose to initially deploy the categorisation outlined in Chapter 7 (see Section 10.2) to consider the uniformity of student representations at different points in time and using different methods. However, throughout Sections 10.3 to 10.7 I subsequently use the students' voices as a tool to break down these categorisations and to individualise their stories. While this was not an easy feat, I use the lens of intersectionality to enable rich description. I also highlight Qabilah's story in Section 10.8 as an in-depth case study to articulate interesting points of similarity and difference within the data and to

illustrate the complexity of student representations of geographical knowledge. A key article - Bar-Gal and Sofer (2010) – which was reviewed in Chapter 4, is also revisited in Section 10.9. Finally, Section 10.10 provides a critique of perspective categorisation, the theory which underpins this chapter and suggests how this may be developed further in light of my findings.

## 10.2 The categorisation of representations

In the same way that the initial statements from the questionnaires were categorised using perspective categorisation theory in Table iii.2 (Walford, 1996; Catling, 2004), I undertook a similar process with students' collages and interviews. Each collage and part of the interview focusing on representations of geographical knowledge was assigned a category - placeist, generalist, interactionist, thematicist or synthesiser (see Table 7.2 for an outline of each category). While categorisation was not an easy task, particularly given the complexity of the interviews, an approach was employed in which the interview transcript was read several times and the category or categories that 'best fit' were selected. The categorisation of collages was also difficult due to the fact that students had interpreted the instruction to 'create a collage' in different ways. Some students had brought their own images to the session while others were constrained by their perceived inability to draw and preferred instead to create a mind map. The collages are reproduced in Figures 10.1 – 10.8 while categorisations for each student and method can be seen in Table 10.1.

*Table 10.1. The categorisation of students' questionnaire statements, collages and interviews.*

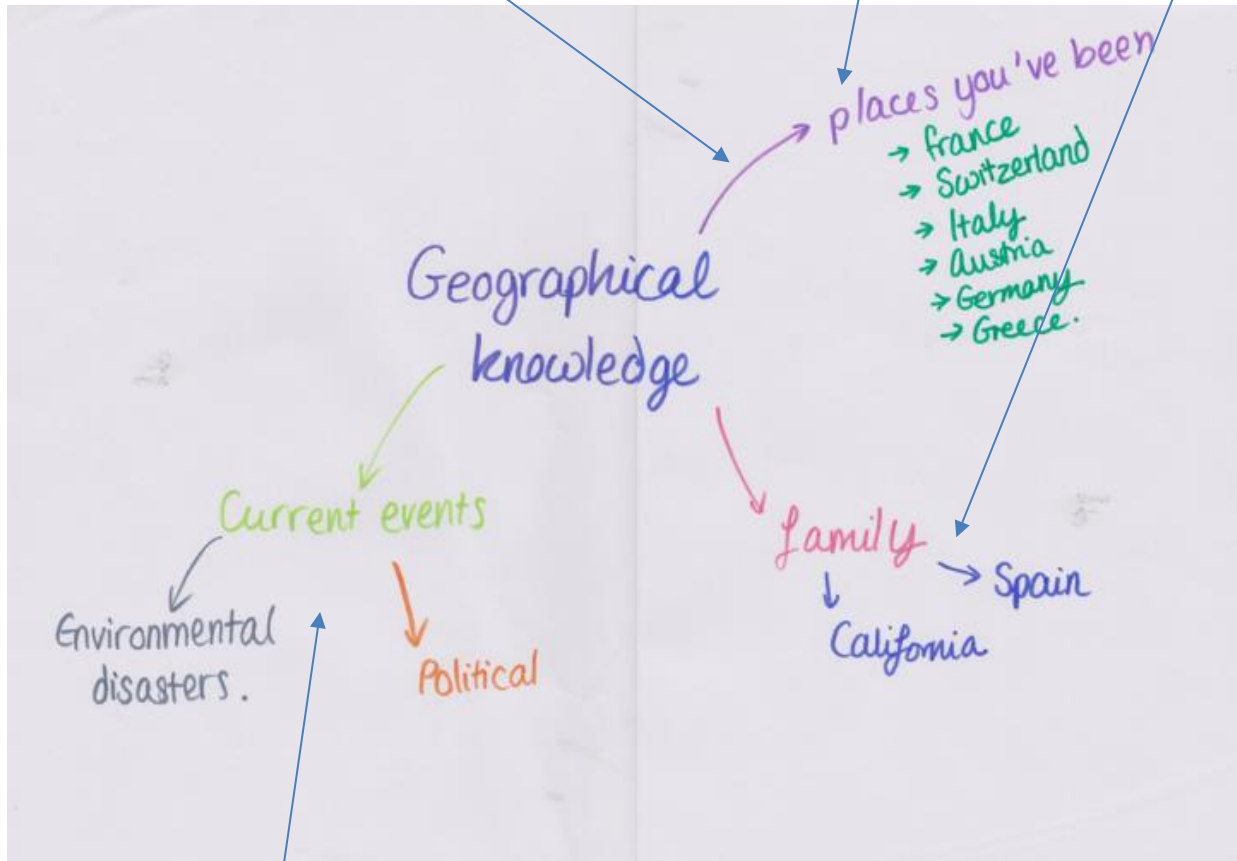
<b>Student</b>	<b>Questionnaire</b>	<b>Collage</b>	<b>Interview</b>
Marie	Thematicist	Placeist	Placeist
Naomi	Thematicist	Thematicist / Synthesiser	Synthesiser
Olivia	Placeist	Placeist	Placeist / Synthesiser
Philippa	Thematicist	Interactionist	Interactionist
Qabilah	Thematicist	Interactionist / (Environmental – see Section 10.10)	Interactionist / Synthesiser / (Environmental – see Section 10.10)
Rosie	Placeist	Thematicist	Thematicist
Sabah	Thematicist	Thematicist / Synthesiser	Synthesiser
Tabitha	Interactionist	Thematicist	Interactionist

The basic patterns in Table 10.1 show that the different methods of questionnaire, collage and interview result in different categorisations. Also, where students were assigned only one category in the questionnaire, three of the collages and two of the interviews are allocated more than one. The thematicist categorisation which was the dominant perspective captured by the questionnaires was a significant feature of four of the collages but only one of the interviews.



It is the focus on specific places which led me to categorise Marie's mind-map as placeist.

Marie mentions a number of different places on her collage mind-map. Most of these are European countries and places to which she has travelled. However, her mother is American and so she also mentions California which is where her mother's family lives.



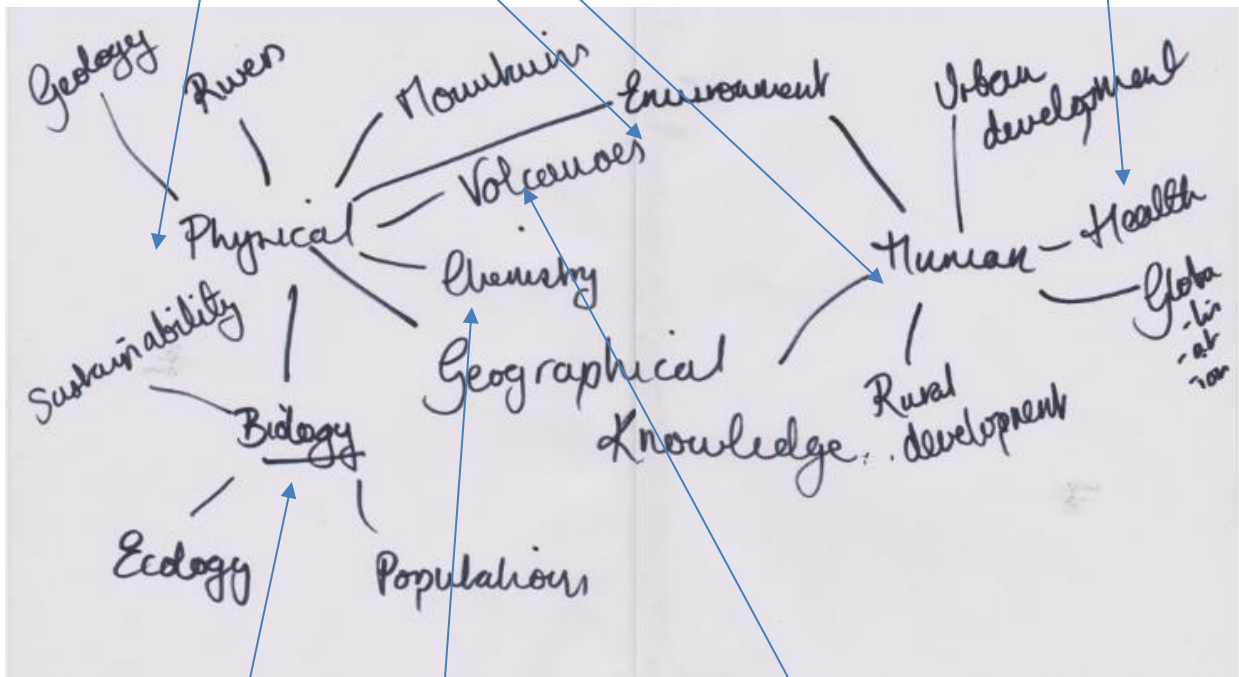
Marie's mind map mentions current events which she divides into those which are political and those which relate to environmental disasters. While she does not give specific examples to illustrate these categories she reiterates several times that having an awareness of current events is important.

Figure 10.1. Marie's collage representing her view of geographical knowledge (Placeist)

Naomi identifies the environment as a bridge between these human and physical topics. This begins to suggest an interactionist perspective. However, as it is not an explicit feature of the examples she gives I have chosen not to classify this representation as such.

Naomi divides her mind-map into topics which she describes as human geography and those which she describes as physical. This explains my categorisation of this representation as thematicist.

Naomi gives four examples of topics which she describes as human. Three of these – urban development, globalisation and rural development – are the three topics which she studied for the human paper of her GCSE Geography exam the previous year when she was in Year 11. The fourth topic is one which is studied as an option for the AS exam. Naomi explained that some of her friends were doing AS Geography and had told her what they were studying. Naomi wanted to go into a career in medicine which is perhaps why this topic features on her mind-map.



Naomi linked the part of her mind-map which covered physical topics to the subjects of chemistry and biology and identified ecology, sustainability and populations specifically. This secondary focus resulted in the classification of this representation as synthesiser in addition to that of thematicist.

The topics that Naomi had studied for the physical paper of her GCSE Geography – coasts, weather and climate and glaciation – did not feature in the physical part of her mind map. Instead, it included volcanoes and rivers that she had studied at KS3. Her inclusion of mountains and geology was interesting as these had not been topics of study during her secondary school career. She explained that her father had studied geology at university which might explain their inclusion.

Figure 10.2. Naomi's collage representing her view of geographical knowledge (Thematicist / Synthesiser)

Olivia's representation is a mixture of collage and mind-map. While she includes physical geography and people / culture this is not a dominant feature.

Olivia's focus on the local area and countries including Kenya, Borneo and South Africa have resulted in my classification of this representation as placeist.

The images that Olivia uses are a mixture of her own photographs and those which she has sourced from the internet. Specifically, the photographs of Kenyan children and her World Challenge group visit to Borneo are those which she took herself.

Olivia is the only student to include references to the local area on her collage. She identifies the local area as one of her four organising concepts (shown in red) and includes two images from the internet of the town in which Claytons is located.



Although Olivia does not mention geography's link to other subjects explicitly in her collage, some of the key terms (shown in green) are those from her A level World Development studies. For example the specification includes a detailed consideration of GDP as a measure of development, poverty and postcolonialism all of which are mentioned.

The words in blue are those things – predominantly skills – which Olivia explains that geographical knowledge can give you. They include things such as confidence, appreciation, comparison, understanding and insight.

### 10.3. Olivia's collage representing her view of geographical knowledge (Placeist)

The vocabulary that Philippa used is interesting. Particularly in reference to physical geography she often mentioned 'mechanisms' as being important. Her collage also includes subject specific vocabulary such as 'topography' and 'slip off slope'

Philippa's collage is a mixture of printed images and her own hand-drawn diagrams and annotations. She broadly splits the collage into physical (right-hand side) and human (left-hand side) but makes links between the two explicit, both in the annotations she makes and in her commentary.



Out of the eight collages, Philippa's has got the most technical diagrams. Her meander diagram is hand-drawn but the others are printed. Typically, these reflect physical topics studied at either AS or A level. She had formally studied rivers, deserts, plate tectonics and atmospheric systems at this level

Figure 10.4. Philippa's collage representing her view of geographical knowledge (Interactionist)



Qabilah began her collage by drawing a couple of diagrams from the recent physical topics she had been studying for her AS level geography. The meander in particular is labelled with technical terminology – thalweg, river cliff, deposition.

Many of the pictures on Qabilah's collage appear simplistic but her commentary reveals a more complex understanding. For example, the image of McDonalds represents globalisation – the TNC again showing her knowledge of subject specific vocabulary – and the aeroplane illustrates both food miles and money wasted. This latter idea was particularly interesting as Qabilah talked about the benefits of globalisation for some not all.

The image of the Earth was the final one which Qabilah added. She added the slogan – 'sharing is caring' – underneath and explained the importance of people living together peacefully in the world.



There is no clear human / physical divide evident in Qabilah's collage. Instead many of the images overlap between the two and have an environmental theme.

Qabilah's geographical knowledge and understanding are evident in several places. For example here, she shows the top soil being removed by wind erosion when the trees have been deforested.

Qabilah described an image which she had seen in a magazine which had a big impact upon her. She tried to re-create it here. It was an image of a large tsunami wave which was about to destroy a village and the caption 'nature cannot be controlled'. She talked about the power of nature and the need for people to understand this power and their own actions.

*Figure 10.5. Qabilah's collage representing her view of geographical knowledge (Interactionist / (Environmentalist))*

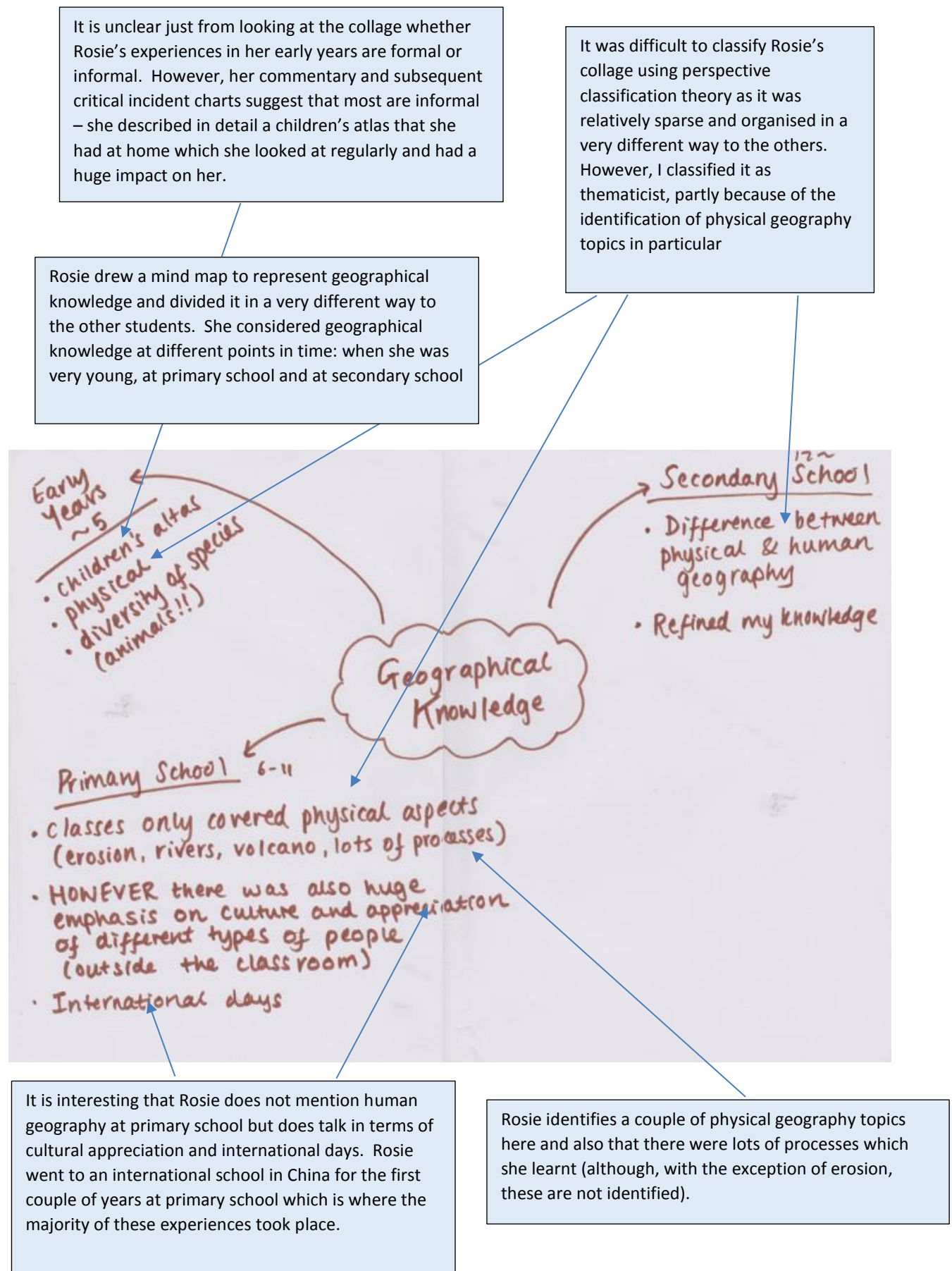


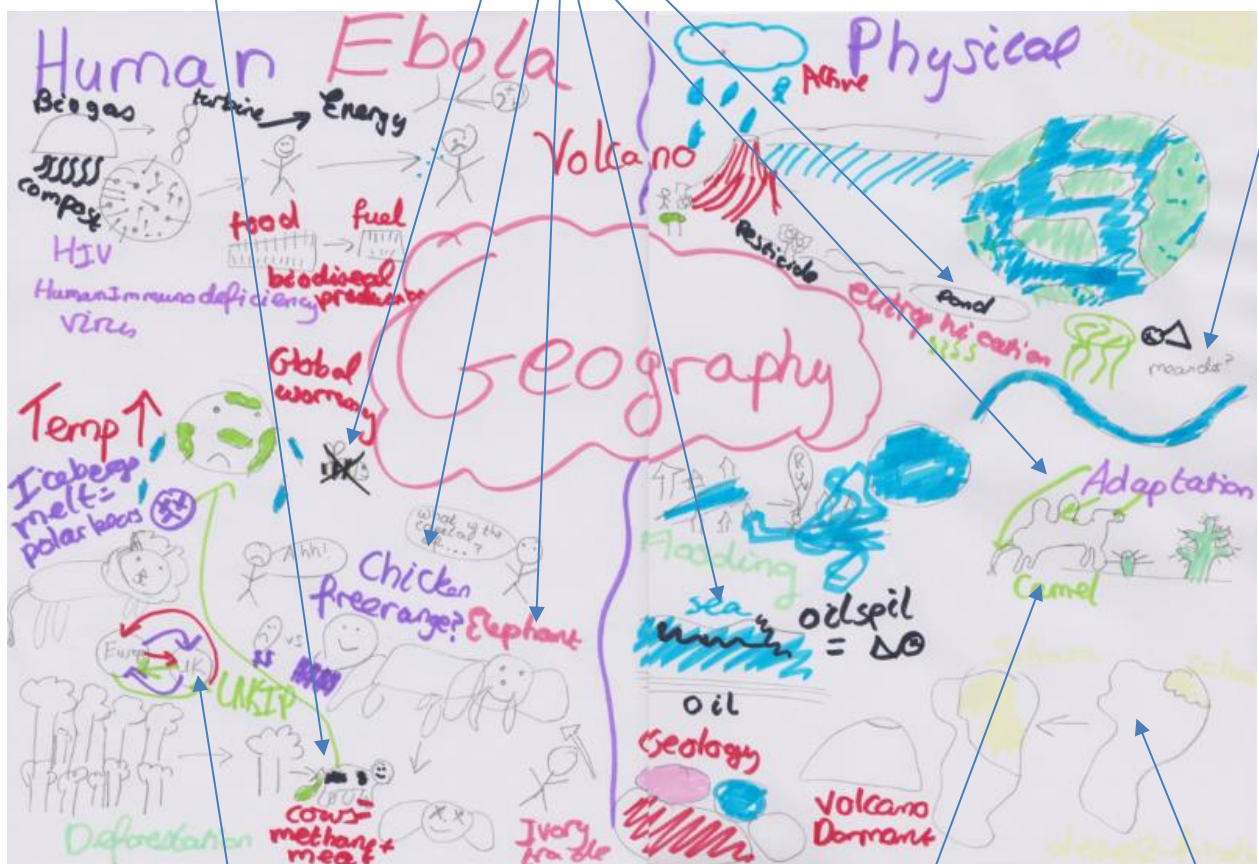
Figure 10.6. Rosie's collage representing her view of geographical knowledge (Thematicist)

Sabah mentioned several topics that she had studied in science but which she felt overlapped with geography. For example, biodiesel production, HIV, Ebola and global warming.

Animals seem to be important in Sabah's collage. She draws images to show animal adaptation to climate, the issue of disappearing bees, free-range chickens, the ivory trade in elephant tusks, methane produced by cows and the effect of eutrophication and oil spills on fish.

Sabah's collage is very busy and includes a number and variety of ideas. She has organised her collage into human and physical geography and drawn a very clear dividing line down the middle. She explained that her friends had told her that this was how they studied the subject and this had influenced the way in which she decided to organise her ideas.

Sabah's images are more like comic strip images than technical diagrams. She does use some technical terms – although these are often those she has learnt in science. She has put a question mark next to 'meander' and asked me whether this was the right terminology or not.



Several of the things that Sabah mentioned came from her interest in podcasts. For example, she had listened to a programme on the rise of UKIP and the UK's relationship with the European Union and she thought this was an important feature to add to her collage.

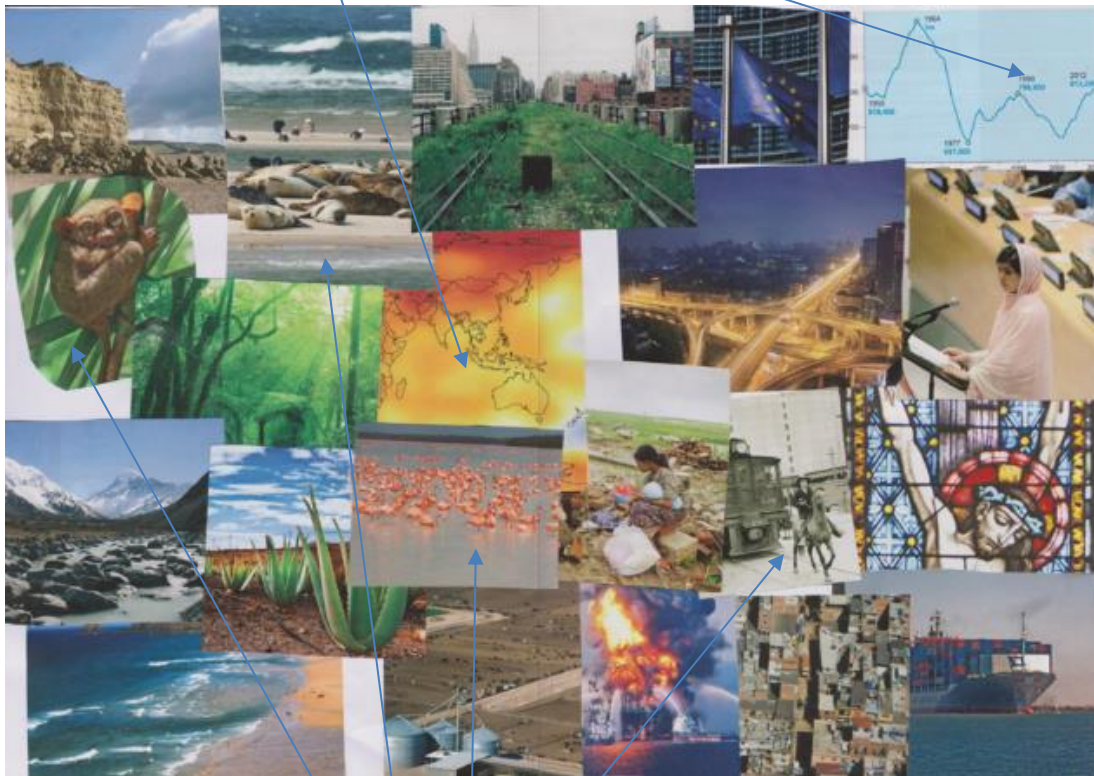
Sabah seemed quite interested in desert environments. She remembered a lesson from Year 8 on animal adaptations to the desert climate and talked about desertification which she saw as being a significant problem in parts of northern Africa.

Figure 10.7. Sabah's collage representing her view of geographical knowledge (Thematicist / Synthesiser)



Tabitha's collage is dominated by photographs however, it does include a thematic world map to show global average temperature and a graph showing the number of births in the UK. She explained that if she could do it again she would add more graphs and diagrams; 'things we do in school'.

Tabitha had sourced her images from magazines and newspapers at home rather than the internet. Although the collage itself does not make links between images explicit – for example by drawing arrows between concepts – she talked at length about the links she saw between them.



It is interesting that many of Tabitha's images include animals. This is perhaps unsurprising given that she wants to study zoology at university and she makes the link in her interview between biology and some of the images in her collage.

The images also do not seem to obviously link to topics she has studied formally which is something that Tabitha identifies. She explains in her interview that you could link these images to things that she has studied but she was not doing this particularly when she chose the images.

*Figure 10.8. Tabitha's collage representing her view of geographical knowledge (Thematicist)*



These eight collages vary in terms of detail, format and material despite students being given the same instructions. Five of the students produced collages using images predominantly while three of the students created mind-maps. In addition, three of the students who presented their representation as a collage brought printed images to include. Philippa and Tabitha had sourced all of their images from the internet, while Olivia had also included some photographs which she had taken herself.

### 10.3 A diverse range of representations

The first finding from this research is neither controversial nor particularly surprising, particularly given my constructivist epistemology. It is that the students in this research appeared to have different and a more diverse range of representations than those described in Kitchen (2011; 2013a; 2013b) which used the similar methods of collage creation and semi-structured interviews to describe younger students' perceptions of geography. The research described in Kitchen (*ibid*) was carried out with six Year 7 students at the start of their secondary school careers and found that student perspectives were focused on place, maps and topics which had recently been studied in the formal curriculum (both primary and secondary). Their macro-knowledges<sup>101</sup> of geography were, at least among the five students who were of White British ethnicity, strikingly similar. They all chose to put a globe as a central feature of their collages. It was only the student who identified as being of Indian ethnicity who drew a collage that was significantly different to the others. Her collage did not include a globe at all but instead illustrated a range of issues concerning the pollution of the environment.

There are two main differences between the Year 7 students' collages and the collages created by the sixth form students towards the end of their secondary school

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<sup>101</sup> The terminology used here – macro-knowledge and micro-knowledge – is my own having arisen from the research described in Kitchen (2011; 2013a and 2013b). Essentially, macro-knowledge is used to describe the students' big picture view while micro-knowledge is the detail that enhances, illustrates and brings this big picture into focus. For example, a student's macro-knowledge of geography may include topics such as weather and climate; the micro-knowledge here may include rainfall, temperature, climate change, weather forecasting etc. While macro-knowledge could potentially be used interchangeably with the categories which have arisen from perception categorisation theory, I would argue that macro-knowledge provides a broader and more defined overview. For example, two students whose collages have both been classified as thematicist may have significantly different macro-knowledges of geography, highlighting different topics within a human / physical framework or displaying a different balance between human and physical topics.

careers. Firstly, the students in this study represented significantly different macro-knowledges of geographical knowledge within the group; while there were similarities, every collage was clearly distinct, there was no unifying, central image and the other images they used were diverse (see Section 10.5). Secondly, this macro-knowledge was not tied to the students' ethnicity. For example, the three White British students created very different collages illustrating three very different macro-knowledges. Naomi had a clear physical - human split which included topics which she had studied at GCSE and links to biology, a subject she was studying at A level; Olivia created a collage which was focused on place and specifically the places where she had been travelling and Philippa, while acknowledging the physical - human split focused on the links and causal mechanisms between topics (Figures 10.2, 10.3 and 10.4).

It is likely that these differences were a function of the small sample size and differing research methods used in the two studies. While collages were created in both studies the instructions given to students were different. The younger students were asked to create a collage to explain what geography was to someone who had never studied it before, while the older students in this study were asked to create a collage which represented their view of geographical knowledge. The terms 'geography' and 'geographical knowledge' appear to be treated in a similar way by the students – the Year 7s focused most of their collages on knowledge despite being given the broader remit – yet the alternative instructions or audience may account for the differences observed. In addition, the Year 7 students were all chosen from two tutor groups who were both taught by me, while the sixth form students were chosen from two different year groups and eight different tutor groups. Three of them had never been taught geography by me during their secondary education and, of the five that had, only one was in my class during the data collection phase.

This finding could also be a result of my foregrounding of identity in this study. During the first phase of research I deliberately selected students of different ethnicities; I explicitly looked for difference. It is unsurprising that, from my perspective, the contrasts between the collages were uppermost in my interpretation than the similarities. It is also worth considering whether other facets of the students' identities, and particularly their age and status within the school community, highlighted these differences. Simply by being five or six years older, the students in this study are likely

to have had a greater number and more varied experiences than the students described in Kitchen (2011; 2013a; 2013b) and are also potentially more able to articulate and explain their representations in more detail.

#### 10.4 Representations reflecting formal and informal experiences

A second finding is that most of the collages and interviews reflected concepts that students had studied during their secondary school careers; they were dominated by images from their formal experiences of geography. Not only this, but they tended to reflect those formal experiences which were most recent. Generally, students who had studied geography for GCSE but not A level had collages which had a clear physical – human geography split; a feature of the thematic GCSE specification they had studied. However, while Naomi's collage was split into human and physical geography, the topics that she identified as human geography – rural development, urban development and globalisation – were those that she had studied at GCSE although those that she associated with physical geography – rivers, mountains, volcanoes and geology – were not. While broadly thematic, Naomi also included links to science and particularly biology within her collage (Figure 10.2). It may be that the aspects of physical geography which she highlighted were more aligned with the science curriculum which she was studying at A level, or may have been included as a result of informal experiences; Naomi's father had studied geology at university. It may also have been a result of her level of enjoyment of particular topics. Naomi was clear in her interview that she preferred human geography topics to those which were physical and so had perhaps included topics which she enjoyed, and therefore remembered more clearly, in her representation.

This slight disjunction, where either collages or interviews straddled more than one categorisation or the detail in students' descriptions did not always exactly mirror the initial categorisation, was a feature of several of the students' representations. The micro-knowledge, the detail in the representations, sometimes jarred with the categorisation that I had suggested. This was unsurprising, particularly as Walford (1996) and Catling (2004) highlight the atomistic nature of student perceptions and the

fact that categories do not equate with overviews of geography. It was also partly a feature of my attaching a simple categorisation to a complex, detailed and rich representation. However, it may also have been a result of the different influences on these representations. In some cases, informal experiences seemed to provide the overarching framework while formal experiences provided the detail. For example, Sabah, who had not taken geography for GCSE, included several images from topics she had studied during KS3 (Figure 10.7). Yet, these pictures were organised within a physical – human thematic framework because, as she explained:

*'I split it into human and physical because that's what my friends say they do in geography so I thought that would be a good place to start.'*

Sabah

Students who had not studied geography to A level were also more likely to link their representations of geographical knowledge with other subjects that they were studying. Naomi and Sabah included explicit links with science, while Olivia included concepts from her AS World Development which she saw as overlapping (Figures 10.2, 10.3 and 10.7). It may be that these students were looking for a synthesis between subjects that they had chosen - and were currently studying and were confident discussing - and the subject that they were actually being asked about.

Those students who had studied geography at AS and A level – Philippa, Qabilah and Tabitha – superficially had very different collages compared to each other and yet, in looking closely there were striking similarities (Figures 10.4, 10.5 and 10.8). They were all dominated by topics that they had studied most recently and were more likely to include technical diagrams as well as photos and pictures. They did not categorise the images into physical and human geography but instead focused on physical and human interactions and drew synoptic links between them. Philippa's collage in particular was covered with arrows illustrating the interactions between different aspects of the subject while Qabilah's collage had a distinctly environmental theme which again, is reflective of the AS and A level course that she had been following. Tabitha, the only A level student, did not clearly represent geographical knowledge as being interactionist on her collage, yet her subsequent interview highlighted the links clearly. She explained that while she could have made the links more explicit on the

collage she had chosen not to because she wanted the person viewing the collage to do this themselves.

*'It just depends which way you're looking at it. So I don't know, I think I quite like having just the pictures because you can interpret it yourself and make your own links.'*

Tabitha

Knowledge deals with the principles and facts which an individual can recall, while understanding is more subtle, it is about making sense and giving meaning, about making connections and comprehending relationships (Bennetts, 2005). It seems that the collages and interviews of these three students who had studied geography formally for the longest time and to the highest level, show understanding rather than knowledge. In my experience as a practitioner, it is possible, particularly for higher attaining students, to achieve at GCSE with geographical knowledge but without geographical understanding; learning the case studies, key concepts and vocabulary and recognising command words can be enough. However, to be successful at A level an understanding of concepts and processes is required which is perhaps why the collages of these three students showed evidence of this.

While topics from formal experiences of geography dominated, several of the collages demonstrated the importance of informal experiences. Some of these were subtle; for example, Sabah, in a collage dominated by her KS3 experiences and links with her science studies, also included biodiesel production and UKIP as these were things she had read in the news. However, two students created collages that were dominated by informal rather than formal experiences. Despite a nod to her World Development studies, Olivia's collage was primarily a celebration of her travels. She had included photographs in her collage that she had taken herself, of children that she had met in Kenya and of her standing at the top of a mountain in Borneo. She was also the only student to feature local geography with images of the town in which Claytons is located (Figure 10.3). Marie's collage appeared to be completely created from her informal experiences of geography; something which she reiterated strongly during her interview. Despite studying the subject at GCSE level she was the only student to seemingly ignore her formal studies and instead divided her collage into

places she had travelled, places where members of her family had originated and events that were in the news.

Exploring the stories that relate to students' representations of geographical knowledge is a key element of this research and one which is picked up and developed in Chapter 11. However, at a simple level, my status as a geography teacher and the fact that the representations were all created at school could have encouraged students to consider formal experiences over informal ones. They may have seen me in my role as teacher rather than in my role as researcher and perhaps assumed I was interested in the geography they had been formally taught. Both Marie and Olivia, whose representations were most dominated by informal experiences, had never had me as a geography teacher and so it was perhaps easier for them to accept my researcher identity in this context.

It may also be the case that students were more comfortable discussing things which they associated with pleasant memories. For example, Sabah, when discussing geography fieldwork said that she had blocked out most of the memories of her Year 8 experience because she did not enjoy it. She could not recall what activities she had done while on the fieldtrip and her responses at this point in the interview were short and clipped. Equally, even though students may have enjoyed geography specifically it may be their formal experience of school generally which may have been uncomfortable. Marie, as she explained as we were talking after her interview, had found the pressure which she had put on herself at school traumatic and she regarded her extra-curricular activities and particularly music, as therapy. It is unsurprising that her representation of geographical knowledge is linked to these informal and more positive associations.

It was also interesting that some students perceived a disconnect between their representations of geographical knowledge and the knowledge that they had been taught in school. Tabitha in particular recognised that the geographical knowledge that she had illustrated in her collage did not really include '*the educational side, the things that you are taught in school*'.

*“T: It seems like I have a bit of an idealistic view of what geography is, because like with geographical understanding, I think a lot of it is based on lessons and how I learnt it. Which isn’t really seen in this directly in a way [points at collage]. I<sup>102</sup>: So do you think that this is not really your view of geography?  
T: I think it’s kind of yes and no. I think it’s like one half of it, but the other half, which is more to do with school and the different processes which you can link into this...but it’s not that clear.”*

Tabitha

This suggests that students’ representations are composed from a mixture of formal and informal experiences which they associate with geography, a theme which is further developed in Chapter 11, and also that different methods result in different representations, a feature which is explored in Section 10.6.

## 10.5 The importance of ‘the Earth’

The third finding to emerge from the representations was the absence of an image of the Earth in most of the collages. A globe or image of the Earth is often used to represent school geography; it is, as Bonnett (2008: 2) suggests, its logo<sup>103</sup>. This was the image that tied most of the collages in Kitchen (2011; 2013a; 2013b) together; the dominance of an image of the Earth, drawn large and in the centre of the paper. These Year 7 students did demonstrate a diversity of perspectives focused mainly on their formal experiences of geography, but images illustrating these appeared around this central image. I suggest that this means that representations of the Earth are a significant aspect of the students’ perceptions which, in turn, may implicitly suggest that maps are important. I also highlight questions which arise from this, specifically whether students are using an image of the Earth to illustrate their understanding of geography as ‘maps’ or of geography as ‘the Earth’ and whether these ideas are interchangeable or coexistent.

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<sup>102</sup> Here, and in other places where there are two voices in the quotation, ‘I’ is the interviewer.

<sup>103</sup> Bonnett (2003: 62) explains that images of the world are ‘part of the public and academic visual imagination of the discipline: they encapsulate its imperial conceit and post-colonial potential’.

In this research the image of the Earth appears to be less significant, possibly because this logo is more visible in KS3 textbooks than those used at GCSE and A level. It makes an appearance in Olivia, Qabilah and Sabah's collages (Figures 10.3; 10.5 and 10.7) but is positioned on the edge of the paper, fairly small and peripheral. In the sequence of creating the collages it was often one of images which was last to be added, almost as an afterthought. Indeed, when Qabilah was creating her collage, the Earth was the final image she added and was accompanied by the passing comment '*I've just realised this is geography!*' Having created complex and detailed representations, it was almost as if the Earth needed to be included to underline the fact that it was geographical knowledge which was the topic under discussion. However, Qabilah followed this statement with the clarification that '*It's the whole world, not just one place,*' suggesting that she has an appreciation of both place and scale, both fundamental to geography. She also commented that '*it's all we have,*' and explained that she was concerned about the way in which the world was being treated. Her image of the Earth which initially appeared superficial and as an afterthought, hides a more complex understanding and representation which was only elicited as Qabilah described and explained her collage.

While the image of the Earth appeared a less significant feature of the collages, during their interviews Qabilah, Sabah and Philippa were all clear about which one image they thought best represented their view of geographical knowledge:

*'I think it would be the world because geography's kind of everything to do with the world...How the humans change their environment...It's all the countries on there and that shows distribution, and if you could kind of watch them from space you would see that it would change loads over time and you could see cities built up, populations moving and things and then it has also got all the physical aspects of geography. Yeah, that's what I think I'd pick.'*

Philippa

This view of geographical knowledge as being to do with 'the Earth', is very similar to that expressed by the Year 7 students in interviews which discussed the images they had included in their collages (Kitchen, 2011). However, it is important to recognise, as Hopwood (2012) explains, that although students may mention similar words or



include similar images, they may not necessarily attach the same meaning to them. While Philippa's description is sophisticated encompassing environmental interactions, distribution and change over space and time, the fact that the Earth is her choice of image is interesting, particularly as it does not appear on her collage. However, other students, when asked to select just one image on their collage which best represented their view of geographical knowledge, chose images that were unique to their collages. Olivia chose a photograph of the Kenyan children and explained that this was:

*'...just because that summarised everything on that trip...the landscapes and...understanding the economy of the place and seeing how it's different to ours.'*

Olivia

It is interesting that this is the response to the question 'which single image best represents your view of geographical knowledge?' as she has chosen to equate this with the experience that appears to have been instrumental in forming her representation.

## 10.6 Different representations in different contexts

At the outset, I assumed that the students' general description of geographical knowledge that they outlined in the initial questionnaire would illustrate their macro-knowledge of geography. The micro-knowledge - the detail to support, embellish and enhance this - would come from their collage and interview. In short, I expected to find that a student I categorised at the start as a thematicist would remain a thematicist throughout, although I did not rule out the possibility of some tentatively straying into or straddling other categories. This expectation came from my previous research in this area which had found that a student's macro-knowledge of geography appeared fixed, albeit over a relatively short timescale of four months, and constant between different media (a written statement, collage and two semi-structured interviews). The data from this research suggested that if new geographical ideas resonated with

students' macro-knowledge then they served to add detail and to strengthen the perspective, if not then they were ignored (Kitchen, 2011: 67).

The fourth finding of this research was therefore somewhat surprising, in that all the students, with the exception of Olivia, represented geographical knowledge very differently at the various points of the research when their representations were captured (Table 10.1). For example, Marie, whose initial written statement was categorised as thematic, later focused much more on place and the importance of current affairs in both her collage and interview.

*'...I find that current events is the closest subject that there is to geography...If something's on the news and it's saying it's happening in this country and they show a picture of the map or something, then you should pay attention because you should know where it is and it's showing you in relation to where somewhere is.'*

Marie

While Rosie and Marie demonstrated the most dramatic differences in categorisation between the first phase of research and the second phase, others displayed representations which were difficult to assign to a single category. Naomi and Sabah's written statements had been categorised as thematic. However, their collages and interviews, while retaining elements I categorised as thematic, also illustrated a synthesis between geographical knowledge and other subjects that they had studied. Philippa and Tabitha started with different categories of representation in their written statements – Philippa was a thematicist while Tabitha was an interactionist – yet their collages and interviews demonstrated a mix of both the thematicist and interactionist categorisation. It was only Olivia who appeared to have a single dominant category of representation – that of a Placeist – throughout the different phases and methods.

The students in Kitchen (2011) demonstrated a real confusion concerning geographical knowledge when probing more deeply. They appeared to have a clear sense of the public, superficial view of geography but there was little underpinning these ideas and it was difficult to get a detailed sense of other aspects without them questioning whether they were straying into subjects including science, history and

citizenship. This concurs with findings by Pike (2006) investigating students in the transition between KS2 and KS3, when there was an agreed and clear superficial idea of geography, but this appeared confused when students were asked to add detail. However, many of the older students in my study embraced different representations of geographical knowledge, both extending the boundaries of the existing categorisations and moving fluently between them.

Arguably, this difference in categorisation could be a result of change; students have changed how they view geographical knowledge, their representations have therefore changed and been categorised accordingly. However, the time between the written statements in the first phase and collages and interviews in the second phase was between three and seven months and so a significant change in categorisation over such a short timescale seems unlikely, although the process of reflection could generate change. It is also the case that change in this context is impossible to determine given that the methods used to represent geographical knowledge are different at different points in time. Change could perhaps be identified as a factor if the content of three written statements were being categorised and compared. However, in this research, written, visual and verbal methods were used at the different time points and is a more likely explanation for the apparent differences. It could also be that the short, written definition captured in the first phase of research was limiting for the students; perhaps they could not easily express in writing what some described as a 'vast' subject. Each method is likely to elicit different representations however, this may be constrained by vocabulary or perceived expertise<sup>104</sup>. Taking this idea further, it seemed that the representations of students seemed most clearly defined and articulate in areas where they appeared to feel most secure and comfortable. Olivia clearly felt comfortable as a traveller to distant places and could discuss confidently the geography she had experienced in her A level World Development lessons. It is perhaps then unsurprising that her representation of geographical knowledge was firmly rooted in place and notions of inequality. Sabah and Naomi were both A level scientists and became enthused in their discussion of topics that they had studied in science – particularly biology and chemistry – and how

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<sup>104</sup> This was something that appeared particularly evident in the creation of the collages as Sabah and Qabilah both voiced concerns about the quality of their drawing and Rosie, Naomi and Marie decided not to create a collage at all, instead opting to draw mind-maps.

these related to geography. It was noticeable in several of the interviews that the tempo changed, students became more animated and enthusiastic when they were on their own turf and were adept at shifting the conversation to focus on aspects that they could talk about confidently.

In terms of analysis, as explained in Chapter 7, I took the decision when initially categorising to take the dominant perspective. The categorisation of the collage and interview allowed more than one perspective to be taken into account partly due to the volume of data; there were fewer people involved in the second phase but I was interested in gaining a more detailed understanding. It was also partly because there was no longer a methodological need to be limiting; categorising students under more than one perspective in the first phase of research would have made the process complex and also less robust given the brevity of many of the statements. These observations also support Hopwood's (2004) conclusions in that the narratives which emerge from different methods – in this case a written statement, collage and interview – are not always cohesive and can be contradictory or multifaceted. It also fits with the idea of choice in representation at a given time for a particular purpose in a particular context (Taylor, 2011).

## 10.7 The relevance of 21st century geographical knowledge

As outlined in Chapter 2, geography's history has been one of shifting paradigms and a divergence between the academy and school geography (Walford, 2001; Rawling, 2001; Castree *et al.*, 2007; Rawding, 2010). However, in recent years much has been talked about of a geography for the 21st century, one that puts geographers at the heart of providing solutions to the world's problems such as climate change, mass migration and poverty (Palin, 2011; Dorling and Lee, 2016; Royal Geographical Society, 2016)<sup>105</sup>. An interesting finding of this research was that, regardless of their macro-knowledge of geography and their ethnicity, the students overwhelmingly felt that the important topics that ought to be studied as part of the formal curriculum, that

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<sup>105</sup> Bonnett (2017: 17) is somewhat critical of this notion of geography as useful knowledge for global, 21<sup>st</sup> century citizens. He argues that while it delivers useful skills it has a lack of ambition. It turns geography into something that is small and transitory and fails to appreciate the discipline's wider and deeper appeal.

every student should have knowledge of, were those that would fit with this paradigm. They highlighted poverty, flooding, globalisation, migration, health and the growth of cities as important topics of study, even if they had not always identified these in their own descriptions of geographical knowledge.

*'...Globalisation...I think that's so relevant today because we've got the extensive communication, we've got co-operation between different countries...I think if someone can understand that, that gives you a really good perspective on the world and actually how it works.'*

Qabilah

*'...I suppose the obvious thing that comes to mind is things to do with global warming...Just because I suppose it's more relevant in a way, and it is an issue which people need to learn about.'*

Tabitha

All students felt it was important to be an educated global citizen and that geography could be the medium through which these global issues were taught, although the outward looking, international ethos of Claytons meant that they were also made aware of these issues through assemblies and tutor group activities. This mirrors the findings from an IPSOS Mori poll carried out on behalf of the Geographical Association (2009b). In this research, which surveyed the issues that 598 KS3 students felt were important to study, 93% felt that it was at least fairly important to learn about issues that affected people in other parts of the world. However, in contrast to the issues of poverty, urbanisation and climate change which were highlighted by the students in my research, the younger students tended to think that crime, terrorism and the economy were the global issues that were the most important.

Students felt that such geography topics were of global relevance and therefore important to study, however, images relating to these topics tended not to appear in the collages, perhaps because they were conceptually more abstract or detached from students' lived experiences. They also thought that it was important to have geographical knowledge to be an educated global citizen. Tabitha highlighted that she liked it when she was listening to the news and could make sense of what was

happening, while Sabah explained that she felt it was more important to have breadth of knowledge rather than depth. She explained that her KS3 experiences of geography had given her enough knowledge to function as an educated global citizen but that she did not want or need to study in greater depth at KS4 and 5 because she was not particularly interested in the subject nor needed it for her future career in medicine. Marie and Qabilah both articulated how it was important to have some knowledge of current affairs (which they equated with geographical knowledge) and suggested that those who did not display this came across as ignorant.

*'I: Do you think that having geographical knowledge is important?*

*M: Yeah, because if you don't you're slightly ignorant...it's important to know, to have geographical knowledge...because you can't just know nothing...It's almost like your duty as a human. It seems so weird that someone could go through their life and not take an interest in what's going on in the outside world.'*

Marie

*'I don't think ignorance is a good thing, like 'stupid', that's a bit rude, but if you have a world around you and you have all these resources available like the internet, books, you have all these resources available to you and yet you don't know, you know very little.'*

Qabilah

While students therefore thought this type of geographical knowledge was important, relevant and useful, some struggled to see how the knowledge they had illustrated in their collages was directly beneficial to them individually.

*'I think it [geography] was fun but I'm not really interested in the topics because it's too far away, or for example, in Year 7 we did rain. I don't really see how it would affect me, knowing how rain forms.'*

Sabah

Sabah, in particular, struggled to see how the geography she had been taught at KS3 would be useful in her potential career as a medic, a thread which is explored in Chapter 12. She appears here to adopt an 'experience-bound' perspective which sees

school geography as relevant only if it remains within or close to the boundaries of her personal experiences (Morgan and Lambert, 2005; Hopwood, 2012). However, what is also interesting, is that Sabah appears to have a contradictory view when describing distant places that she has studied in primary school. She describes these as relevant despite the fact that they transgress the boundaries of her direct experiences (see Section 11.4).

A fifth finding of this research therefore, is that students appear to think that having some geographical knowledge is important to be an educated, 21st century global citizen. However, this knowledge makes only a few appearances in the students' written statements, collages and interviews and is sometimes equated with knowledge of current affairs. It could be that the subtle difference in the question – the shift from 'what is geographical knowledge?' to questions about its usefulness – account for this. Indeed, Bar-Gal and Sofer (2010) found a similar focus on 21st century geographical knowledge and citizenship in their research on the importance and purpose of the subject (see Section 10.9). However, it could also be that the students do not necessarily see the geographical knowledge which they represent, and which predominantly comes from their formal experiences, as being particularly useful in their functioning as global citizens.

## 10.8 Case study: Qabilah

Having broadly considered the data and drawn out the main findings, I wanted to consider the story of one of the students in depth; both to indicate the depth of data collected and to explore some of these key themes in more detail. Qabilah was chosen as she was one of the three students who had studied geography to A level; her representations of geographical knowledge were complex and she was articulate in her explanations. Qabilah was a Year 12 student who stated that her ethnicity was Bangladeshi. Indeed, in her interview she said *'I think that I've told you, I come from Bangladesh...'* so, despite being born and growing up in England, she seemed to identify strongly with her Bangladeshi heritage and family whom she visited every few years. She had also travelled in Asia and Europe and wanted to continue this when

she went to university, particularly wishing to travel to Africa. Qabilah lived with both her parents and her younger brother although it was only her father who was referred to during the interview and this was during a discussion about potential careers. She enjoyed reading dystopian novels, and had achieved her silver Duke of Edinburgh Award, although she felt that the expedition phase in particular had taken her out of her comfort zone. Academically, Qabilah described herself as an 'all-rounder' but preferred English and the humanities to science and creative subjects. She was keen to study law at university, had studied geography to AS level and was in the process of deciding whether or not to continue to A level.

Given her relatively substantial formal experiences of geography it is perhaps unsurprising that the first two images that Qabilah drew on her collage were a river meander and a sand dune, aspects of the two physical geography topics that she had recently been examined on. She even stated in the interview that thinking about geographical knowledge would be '*good revision*'. However, having started with diagrams which reflected her recent formal geographical experience she moved on to images which illustrated a more complex, synoptic and environmental perspective. She was particularly interested in the ideas of sustainability and of humans disrupting natural cycles which she illustrated with images of deforestation in the tropical rainforest and a person attempting to hold back a tidal wave which had been inspired by a photograph she had seen in a magazine. This view is similar to the ecocentric positioning of Lisa in Hopwood (2012)<sup>106</sup>, although Qabilah does not go as far as to prioritise environmental over social or economic aspects. Finally, almost as an afterthought, she drew a picture of the Earth in the top right hand corner of the page. She stressed that geographical knowledge was also about knowing capital cities and continents, the core knowledge that Lambert (2011) refers to as geography's vocabulary, although these were not represented within the collage.

Unlike some of the other students, Qabilah could recall her experiences of primary school geography in detail. Her first memories were from Year 3 or 4 where she

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<sup>106</sup> Hopwood (2012) describes different views which three case study students hold about school geography and the environment. Lisa holds an ecocentric view which focuses on the consequences of people on the physical environment. In contrast, Sara's conceptions are anthropocentric and highlight how people are affected by physical phenomena such as natural hazards. Matt clearly distinguishes between human and physical geography, attaching people to the former and the environment to the latter.



remembered working in pairs to explore an atlas. Towards the end of her primary school experience she described specific topics that she had studied – rivers, volcanoes, cities, catastrophes – and also the ways in which she was taught. In particular, she remembered going on a trip and doing an individual project as part of the rivers topic and making a model of a volcano. She described geography as being a subject that she really enjoyed, partly because she found it interesting to learn new things and partly because it was taught in a different way to other subjects.

*'...it was more discussion based...instead of just having the teacher talking at you, telling you things...it was more like, let's sit in a circle, let's establish what you understand already...and then you'd go off and do something as a group.'*

Qabilah

Technology also played an important role in these experiences as Qabilah remembered the introduction of smartboards and the excitement that was generated when students were encouraged to use one to label a diagram of a river.

Qabilah's experiences of secondary school geography were more vivid and she described this phase of her formal geographical experiences as being where her knowledge had expanded and developed and made her consider the link between the human and natural world which was so evident in her collage. As she was taught geography at all three secondary Key Stages she was able to compartmentalise her experiences and highlight the characteristics of each one.

Qabilah felt that her KS3 geography was broadly thematic. She recollected studying a variety of topics at both of the schools she attended (she attended a different school in Year 7 and then moved to Claytons at the beginning of Year 8) which included cyclones, adaptations to different environments, South Africa, development and volcanoes. She felt that the while the content covered in both schools was similar, the way in which it was taught and the level at which it was pitched were not.

*'...it [geography in Year 7] didn't inspire me and I didn't feel as though I was learning something really complicated...'*

Qabilah

This is probably due to the context of each school; the school which she attended in Year 7 was a comprehensive and Claytons, which she attended from Year 8 onwards, is selective by ability. What is interesting, particularly given her study of geography to at least AS level, is that Qabilah did not necessarily find the geographical content inherently inspiring. It was the complexity of the subject matter rather than the knowledge itself which engaged her, something which is perhaps unsurprising given her high-ability. A similar theme also emerged during her interview when geography fieldwork was discussed. Qabilah highlighted that analysing the data she had collected and drawing conclusions from it seemed *'simplistic'*. She understood that applying the knowledge that she had learnt in the classroom was important but felt that she was consolidating her understanding rather than learning anything new.

Qabilah did not initially mention the content which she studied at GCSE but instead highlighted the media through which this was taught. She felt that KS4 was characterised by diagrams, case studies, the categorisation of impacts into those which were social, political, environmental and economic and the clear distinction between human and physical geography; features which were integral to the exam specification which was studied. By the time she came to study geography at AS level she felt that she had a good grounding and was able to start to appreciate the complexity of the subject. She recognised that at KS4 the distinction between physical and human geography was clear while at KS3 and KS5 it was less so, although she felt that this was an important feature of developing a students' thinking as a geographer.

*'...I think it's important to understand it's all quite merged, quite generalistic [at KS3]...because your understanding isn't as developed...and then, when you come to GCSE...it's important to distinguish between them [human and physical geography] because you can then realise what things are really human impacts and what things are physical...and then when you come to A level you have that understanding and maturity to be able to see links more clearly...you have a deeper understanding.'*

Qabilah

Following Qabilah's thoughts about each stage of her formal geographical experiences provides an interesting backdrop to her view of geographical knowledge. She was clear in her interview that the subject was more than just '*sticking to the textbook*', and emphasised catastrophes and current events as being important and relevant, things that she had not put into her collage. At several points she also referred to the beauty of the world, a feature which was distinct in her interview rather than her collage, and something that was not mentioned by the other students.

*'...the world is very pretty. I mean, I can't draw very scenic pictures so I would add in more scenic pictures [to the collage].'*

Qabilah

My interpretation of Qabilah's view of geographical knowledge through the lens of intersectionality is at best partial given the number of aspects of and influences on her identity and the relatively short period of time in which I got to know her. However, there are some interesting points to note particularly at the intersection of her being a Bangladeshi woman of high-ability. The first of these is her view of geography fieldwork. Qabilah, while appreciating the beauty of the world, was not keen on geography fieldwork and in particular did not like getting her hands dirty.

*'...I think I'm just a bit scared to get my hands dirty...I think it's because most of our fieldwork trips were in the cold...I'm really scared of mud. I don't like mud. I hate it.'*

Qabilah

She also, as highlighted above, did not feel the fieldwork<sup>107</sup> was developing her understanding, it lacked complexity, and so she explained that her experiences were not particularly positive. Coupled with this, physical fieldwork in particular has come under feminist and postcolonial scrutiny and is largely projected and experienced as a White and masculine endeavour (Kobayashi, 1994; England, 1994; Sparke, 1996; Luzzader-Beach and MacFarlane, 2000; Valentine, 1997; Bracken and Mawdsley;

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<sup>107</sup> Fieldwork makes up between 25 and 30% of GCSE and AS level exams respectively and therefore is a significant aspect of each qualification, both in terms developing geographical skills and knowledge.

2004). It may be that girls from ethnic minorities, such as Qabilah, may find geography off-putting given the significance of fieldwork within the specifications.

A second point to note is that as a high-ability girl in a single-sex school where a 'can do' attitude prevails, Qabilah has many potential career options open to her and her chosen career is likely to be high-powered. Indeed, regardless of their ethnicity, most of the students in the second phase of this research had a clear idea of what they wanted to do as a career and, without exception, these choices were academic and professional. Qabilah either wanted to be a lawyer or a politician and she was keen to explain that, if she did decide to be a lawyer she would focus on environmental law. It is likely that her collage and interview had strong environmentalist themes as a result of her interest in this aspect of a potential career.

In summary, Qabilah was able to identify and describe differences in geographical knowledge and in the way that she was taught at various school stages. She did not necessarily find the geographical knowledge she was taught inherently interesting but was keen to discover knowledge that was new to her. Her identity as a Bangladeshi woman of high-ability appeared to influence her feelings about geography fieldwork and her environmental view dove-tailed with a potential career in environmental law.

### 10.9 A critique of 'Israeli students' perceptions of geography instruction goals', B. Bar-Gal and S. Sofer (2010)

The findings in this chapter have enabled me to revisit key pieces of literature with the aim of comparing them with my study. Chapter 4 provided a critique of the article by Bar-Gal and Sofer (2010) which was both a stimulus for this research and an example of the limited literature which lies at the intersection of ethnic minority views and geography education. Here, I discuss my findings in relation to this article which serves to offer a full and robust critique but which also allows the illumination of points of difference.

One difference between Bar-Gal and Sofer's study and this research is the question being asked to students. While my study is centrally concerned with geographical knowledge and asks questions about this directly, the 2010 study is focused on the importance and purpose of the subject. The authors asked questions including 'What is the importance of geography?' and 'What does learning geography contribute to your life?' and the 17 most common responses overall were analysed using content analysis and organised into four categories. Knowledge is a feature of two of these four categories identified (general knowledge and knowledge of geographical principles) but these emerge from the interviews in the first phase of their research. As a consequence, attempting to compare the findings is unwise. Yet, during the interviews in the second phase I did ask students both whether they felt it was important to have geographical knowledge and also which topics they felt were useful to study; it is here that there is a sliver of overlap between the focus of the two studies. These are the findings detailed in Section 10.7 where the interviews with the students in this study highlight concepts such as climate change and globalisation as important and, in their words, 'relevant', topics of study. These topics, which did not appear as significantly in either the collages or in the initial written statements, arguably resonate more, albeit tentatively, with those perspectives of environment and political conflicts identified by the Israeli students; they are examples from the paradigm of 21<sup>st</sup> century geographical knowledge.

A second difference between the studies is the methods used to elicit students' views. While both studies use interviews and questionnaires and involve two stages of data collection – the first to categorise and the second to explore these categorisations – this is where the similarities end. While the purpose of the first phase was similar, in that it was designed to capture students' views regarding the essence of geographical knowledge, the purpose of the second phase was not to test these categories, as Bar-Gal and Sofer had done but instead to break them down, to get at deep and detailed description from only a few students. As this research has found, different methods tend to produce different representations of geographical knowledge and so it is unsurprising that, given the different methods and the epistemology underpinning these, the nature of students' views in this study were not the same as those in Bar-Gal and Sofer (2010).

Perhaps the most significant difference between the studies is their context and the researchers' treatment of ethnicity which is perhaps a consequence of the context. Due to Israel's contested position, political volatility and ethnic segregation, it is unsurprising that Bar-Gal and Sofer present the findings in their study along ethnic lines. The differences in perceptions of geography of different ethnic groups are highlighted because the ethnic differences are visible and acknowledged within society. Ethnicity is therefore the main aspect of identity considered within this study because, for the researchers, it is a significant feature of their context. Coupled with this, Plaut (2014) describes the multitude of ethnicities represented in Israel which are nevertheless often treated as a single group. For example, Arab Christians, Arab Muslims, Druse and Bedouins are often simply categorised as Israeli Arabs. The authors follow this categorisation and essentialise their students into just two; Arab and Jew. The relatively large samples of each, 151 Arab and 129 Jewish, also encourage the authors to make bold statements which categorise perceptions according to ethnicity.

Compare the situation in Israel to that in the UK where the tendency is to ignore ethnic difference, to make ethnicity less visible. Indeed, as Gillborn (2016) explains, in today's UK society to talk about ethnicity and racism is to acknowledge difference.

*'I think that the true racist sees everything in terms of race, or colour. Surely what we should be aiming to be is colour blind.'*

Philip Davies MP, member of the Commons Culture, Media and Sport Select Committee.

It is interesting to couple this with the uncomfortable feeling that others project when discussing my research. Many have struggled with the vocabulary that they feel they ought to use – *'am I allowed to say Black?'* – or have started sentences with *'I'm not racist, but...'* suggesting that ethnicity is something that they are not comfortable about discussing for the reasons outlined above. As Gillborn (2016) suggests, language is mediated to appear colour blind because the alternative is perceived as racist.

Combine this with my intersectional perspective of identity, where ethnicity is a factor but considered alongside other aspects such as gender, ability and social class. I use

ethnicity as a starting point, mainly due to the factors that prompted me towards this research question in the first place, rather than an end point as Bar-Gal and Sofer do. I am unable to draw such stark conclusions along ethnic lines because firstly, I do not want to and secondly, I cannot. My intersectional approach means that there many features of identity which coincide in my students, they are female, high-achieving teenagers. Yes, they are from different ethnicities, in the same way that they are from different religions, cultures and, to a lesser extent, socio-economic backgrounds, but not one of these facets of their identity is any more or less important than another. It is true that, at least in the beginning, I chose to shine a light on ethnicity but I did not want this to be the end point of this research. Even if I had wanted it to be, the very small numbers of students who engaged in the second phase, means that I cannot. Most ethnicities in the school were not represented in this second phase and those that were had, with the exception of White British, only one student. Therefore, while Bar-Gal and Sofer suggest that students of different ethnicities have different perceptions of geography, this is not a conclusion that my findings straightforwardly support. Instead, students have different representations of geography which differ as a result of many complex factors of which ethnicity is one.

#### 10.10 A critique of perspective categorisation theory; Walford (1996) and Catling (2004)

In my decision to engage with perspective categorisation theory I was acutely aware of its inherent problems (Chapter 7). Perhaps most importantly, I had, by naming it as a theory, formalised and merged two ideas which superficially appeared similar but were intrinsically different. Walford's (1996) categorisation was based on 105 Secondary PGCE geography students from one UK institution; Catling's (2004) was based on 218 primary teacher trainees some of whom had geography as a specialism but a great many of whom did not. Walford used previous coding frames as a starting point although many of his responses did not fit easily within these structures, while Catling's approach was more grounded. Despite only eight years between the two articles, the curricula on which they were based were significantly different. Walford's data was collected between 1990 and 1994 at a time of flux where the geography

working group were working to create the National Curriculum, which had become embedded by the time Catling wrote his article in 2004. However, there were also clear similarities which is fundamentally why I took these as the basis for perspective categorisation theory. Both used written responses. In Walford's case students were asked to provide a short definition of geography, while in Catling's the students were asked to respond to two questions; 'What is geography?' and 'Why teach geography to primary children?'. They also both engaged in interpretivist and evaluative analysis to develop different ways of categorising perspectives of geography.

My research has deployed perspective categorisation theory in a different context; rather than categorising the perspectives of postgraduate students I categorised the representations of secondary students. Also, while initially in the first phase of research the data corpus was similar – 314 written statements in answer to the instruction 'Write a short paragraph which defines what you understand by the term 'geographical knowledge' – the second phase of research allowed a more in-depth analysis of the initial categorisation using both verbal (interview) and visual (collage) media with just eight students. In a similar way to Catling (2004), the approach I used to categorise the initial questionnaires was grounded in that the categories emerged from the statements themselves. Yet, my subsequent analysis and categorisation of the students' collages and interviews was similar to Walford's in that I had already developed a categorisation which I then applied. My resulting categorisations had distinct overlaps with both Walford and Catling's categorisations (Table 10.2).



Table 10.2. The categories identified by Walford (1996), Catling (2004) and this research.

Walford (1996)	Catling (2004)	Kitchen (2017)
Spatialists ( <i>spatial analysis</i> )  Interactionists ( <i>links between physical and human</i> )  Synthesisers ( <i>geography as cross-disciplinary</i> )  Placeists ( <i>character of place, regions and countries</i> )	Globalists ( <i>focus on the variety of environments and countries – global interest</i> )  Earthists ( <i>knowledge and understanding about how the world works</i> )  Interactionists ( <i>interrelationships between social and natural processes</i> )  Placeists ( <i>understanding and developing a sense of place</i> )  Environmentalists ( <i>environmental concerns, issues and sustainability</i> )	Placeists ( <i>knowledge focusing on the locations and characteristics of places</i> )  Generalists ( <i>knowledge of geography</i> )  Interactionists ( <i>knowledge that links human and physical processes</i> )  Thematicists ( <i>thematic knowledge of human and physical patterns and processes</i> )  Synthesisers ( <i>knowledge as cross-disciplinary</i> )  Environmentalists ( <i>environmental concerns, issues and sustainability</i> )

Two interesting points arise from a comparison of these categorisations. The first is that two categories – placeists and interactionists - appear in all three pieces of research albeit with slightly different definitions. However, the proportion of respondents who are categorised as placeist or interactionist differs according to each study. For example, 6% of Walford's students were placeists as opposed to 13.8% of Catling's and 25.8% of the students in this study (Chapter 6). While the proportion of students who were classified as interactionist was similar for this research and Catling's (15% and 14.7% respectively), but significantly larger for Walford's (43%).

The second point is that originally five categories emerged from the questionnaires in the first phase of this research. However, having subsequently analysed the collages and interviews in light of these categorisations I have decided to add a sixth, that of environmentalist (highlighted in Table 10.2). There are two potential reasons why this did not emerge as a category initially. Firstly, those students that mentioned environmental issues within their statements did so among a range of other ideas. As

each student was given only one categorisation, environmental concerns tended to get lost as other representations were more dominant. Secondly, many students wrote words such as 'climate change' and 'global warming' as key words that they associated with geographical knowledge but did not include these ideas within their written statements. My decision to add this as a category is a result of environmentalist ideas emerging from collages and interviews and from those created by Qabilah in particular (Figure 10.5 and Section 10.8). I was struggling to categorise the dominant ideas in her collage as her chosen images and the way in which she described them was significantly different to the representations of other students who I had put in the same interactionist category.

Regardless of the final categories which emerge, perspective categorisation as a theory is fairly limiting. Both Walford (1996) and Catling (2004) highlight that the data collected is atomistic and does not provide a coherent overview of students' personal views. It strips away any detail in the students' representations and, in some cases shoehorns them into a category which is the best, but not necessarily only, fit. However, I maintain that it is useful as a starting point. It begins to highlight the similarities and differences between students' representations and underlines the fact that the students may see, organise and understand the knowledge they are engaging with in different ways. Therefore, in light of the findings in this chapter, I have modified and mobilised the theory to address some of its limitations. This has made it more complex but has added back in some of the detail which had originally been lost.

A key finding from this chapter is that students' representations of geographical knowledge are diverse and differ depending on time and the medium through which they are being represented. They are multifaceted and dynamic rather than one-dimensional and static. Taking the case study of Qabilah in Section 10.8 as an example, I initially classified her questionnaire response as thematicist, yet her collage was initially interactionist (subsequently altered to interactionist / environmentalist) and her interview as interactionist / synthesiser (again, subsequently altered to interactionist / synthesiser / environmentalist). While none of her representations were categorised as generalist or placeist at any point, her interview referenced ideas which would fit with both categorisations albeit in a minor capacity. Therefore, in an attempt

to develop perception categorisation theory and to reflect the findings from this research I suggest the model illustrated in Figure 10.9<sup>108</sup>.

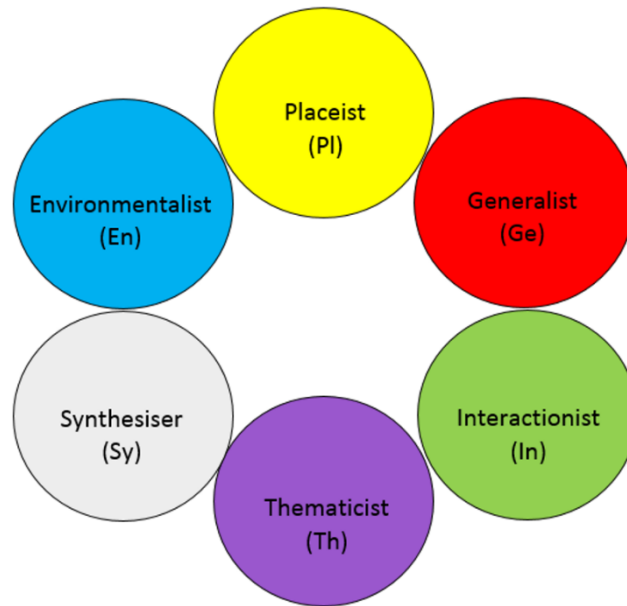
Here, the different categorisations, represented by circles and labelled accordingly in Figure 10.9.i, are all present and of equal size. However, Figures 10.9.ii and 10.9.iii which illustrates how I see Qabilah's representation of geographical knowledge in her interview and collage, changes the size of the circles according to their dominance in her representation<sup>109</sup>. Hers is a representation dominated by the environmentalist category, but with interactionist, thematicist and synthesiser categories of secondary importance. The categories of placeist and generalist do feature but are represented as being of minimal significance in comparison to the others.

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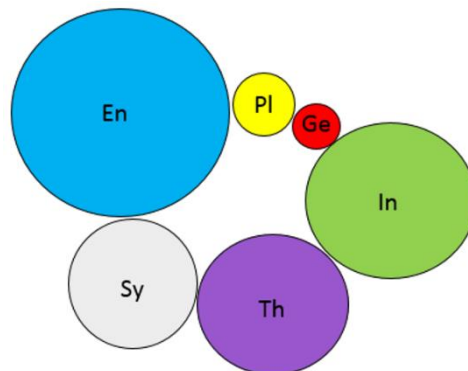
<sup>108</sup> It is worth noting that a subtle change has been made to the naming of this theory as while Walford and Catling were researching perceptions, this research is focused on the representations of students' geographical knowledge. I have therefore termed it representation categorisation theory.

<sup>109</sup> This application of theory to Qabilah's representations of geographical knowledge is interpretivist; I have subjectively altered the proportions of the circles based on her representations as I see them. However, aside from this, my reasoning for not engaging the student in this process is largely pragmatic as having left my job and exited the setting, access to Qabilah and the other students is limited.

i. General model



ii. Qabilah's representation of geographical knowledge in her interview



iii. Qabilah's representation of geographical knowledge in her collage

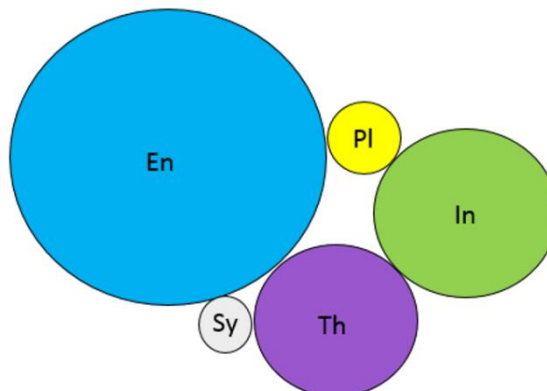


Figure 10.9. Developing representation categorisation theory

## 10.11 Conclusion

To summarise, the key findings from this chapter regarding students' representations of geographical knowledge are:

- that the students in this research appeared to have different and a more diverse range of representations than those described in Kitchen (2011; 2013a; 2013b).
- that most of the collages and interviews reflected concepts that students had studied during their secondary school careers and tended to reflect those formal experiences which were most recent.
- that, unlike in Kitchen's study (2011; 2013a; 2013b) the Earth was not a central feature of the collages.
- that most of the students represented geographical knowledge differently given different methods.
- that students think that having some geographical knowledge is important to be an educated, 21st century global citizen.

These insights enabled me to reflect back on two key areas of literature, allowing me to expand the theoretical conceptualisation of how students represent geographical knowledge and to highlight areas of dissonance with the work of Bar-Gal and Sofer (2010).

However, the absence of direct reference to ethnicity within these findings is stark and arguably this chapter struggles to answer the question addressed in its title in a straightforward manner. Does this therefore make for a poor choice of research question? I would suggest not. Firstly, it provided a starting point for an exploration of students' representations of geographical knowledge which recognises that they are diverse, inconsistent and focused on a geography they see as globally, but not necessarily personally, relevant. Secondly, it enabled the breaking down of

categorisations of ethnicity and the acknowledgement of intersectionality; an examination of how difference, identity and experience interplay and intersect in the context of student representations (Kvasny *et al.*, 2009; Holvino, 2010). Thirdly, it highlighted the aspect that I, as a practitioner, noticed in my classroom. It is true to the initial stimulus of this research which was my interest in the relative absence of ethnic minority students in GCSE and A level geography classes, particularly in the context of an increasing proportion of ethnic minority students within the student population. Finally, I think it is particularly important to focus attention on ethnicity given geography's enduring Whiteness and colonial history which is outlined in Chapter 3. It is vital to listen to the voices and acknowledge the representations of women and particularly women from ethnic minorities given the dominance of White men in the subjects' discourse, construction and development. Consequently, the question asked in this chapter is an effective research question because it provides a starting point and acts as a vehicle for all of these, which I believe is equally as important as the findings themselves.

## Chapter 11

### How do the students' stories relate to their representations?

#### 11.1 Introduction

The previous chapter describes how students represent geographical knowledge in very different ways and that different representations were produced given different methods. It also begins to consider some reasons for these findings; Section 10.4 in particular explores how students' formal and informal experiences relate to their representations. Specifically, this section suggests that most of the collages and interviews reflected concepts that students had studied during their secondary school careers and tended to highlight those formal experiences which were most recent. However, I felt it was important to explore the students' stories which related to their representations in more depth. This was partly because of the nature of this research as a detailed and rich series of stories. The representations themselves were the focus of Chapter 10 and while the stories were there, with the exception of Qabilah's case study, they were largely in the background. Foregrounding them within this chapter allows for deeper reflection and analysis, the bringing of different aspects into focus and encourages the reader to get to know the students a little better.

This chapter therefore picks up the thread from the previous one to explore how students' stories relate to their different representations. It begins in Section 11.2 with a brief analysis of how the stories were told by the students and highlights the problematic nature of this. Section 11.3 then focuses on one of the methods, critical incident charting, to explore the data which emerged. As the findings described in Chapter 10 suggest that formal experiences of geography appear to be significant for most of the students, Section 11.4 highlights students' formal experiences in primary school while Section 11.5 discusses their secondary school experiences. However, informal experiences which include family, friends and the media are also identified and explored in Section 11.6. While the incidents described within Sections 11.4 to 11.6 are by their very nature diverse, there was one student whose lived experience was significantly different to the others. Philippa was home educated until the age of

16 and I have chosen to focus on her story within Section 11.7. Arguably, for a study which attempts to hear the stories of ethnic minority students, featuring the story of a White British student appears counter-productive. However, as I argued in the previous chapter, ethnicity is my starting point rather than the conclusion. Foregrounding Philippa's story allows the reader to begin to understand something that they may not directly experience of. It also allows a comparison of the experiences of a home educated student with those educated in a formal school setting. The chapter concludes with a critique of the literature and theory which underpin it; Section 11.8 discusses Hawkey and Prior (2011) in relation to my findings and the usefulness and re-theorising of perspective influence theory is considered in Section 11.9.

## 11.2 The telling of stories

Students told their stories through both the critical incident charts and semi-structured interviews and I was hoping that a thread between these and their collages and written statements would be evident (Figures 10.1 to 10.8 in Chapter 10 and Table iii.2 in the Introduction to Part III). I was not necessarily expecting these links to be explicit or clear; my findings presented in Chapter 10 suggested that this was unlikely given the different representations of geographical knowledge using different methods. However, it quickly became apparent that the students found it challenging to relate their stories back to their representations even at a superficial level. Often, they described how they felt about the subject, whether or not they enjoyed it, rather than how their experiences had shaped their view. This is understandable as describing and explaining an emotion is more straightforward than trying to explain why you are thinking of something in a particular way. It is difficult for students, indeed for any of us, to think and to express ourselves in a way which we are not familiar with and which we may not even know or understand ourselves. Therefore, throughout this chapter I have been careful not to place too much emphasis on direct links, unless of course the students have articulated these themselves.

In addition, during the interviews students found it difficult to compartmentalise how different types of experience had shaped their view. I used perspective influence



theory (Chapter 2 and Section 11.9) to structure direct questions and students were asked about the influence that various formal and informal experiences including the media, their parents, their friends and their school experiences had on their view of geographical knowledge. However, generally they found it difficult to provide detailed answers to these questions with Sabah's responses being extreme but not atypical.

*I: And do you think that family have had an influence about how you think about geographical knowledge?*

*S: No.*

*I: Not really at all?*

*S: No.*

*I: Your friends?*

*S: No.*

*I: Potential career?*

*S: No.*

*I: Enjoyment?*

*S: No. Sorry what was the question?'*

Sabah

Often these questions were asked towards the end of the interview when the student was perhaps feeling fatigued or aware that they needed to finish the interview to get to a lesson on time. It was also the case that the interview had been wide-ranging and had covered these ideas previously in depth but indirectly. For example, all of the students, with the exception of Naomi and Philippa, mentioned their involvement in the Duke of Edinburgh Award<sup>110</sup>. They described these experiences in those parts of the interview focused on learning outside the classroom or geographical skills and explained clearly the role that their friends, other members of the group or teachers had in this context.

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<sup>110</sup> The Duke of Edinburgh Award (DofE) was created in 1956 in order to develop the skills of young people. 14 to 24 year olds are eligible to work on the award demonstrating they have engaged with a skill, a physical activity, volunteering and an expedition for different amounts of time depending on whether they are working towards their bronze, silver or gold award. Annually, approximately 120,000 young people achieve the Duke of Edinburgh Award and typically around 70% of the Year 10 students at Claytons sign up to take part in the bronze award (Duke of Edinburgh Award, 2017).

*'I don't ever remember being taught [mapskills] in a lesson, but obviously I did D of E...We used to have weekends, like Mr. \_\_\_\_\_ (D of E co-ordinator) makes you come in for a weekend to learn how to read a map.'*

Olivia

*'...the way our [D of E expedition] group was put together, we all hated each other so that probably had an impact. Well, there was two separate groups within the group who hated each other for what one group did.'*

Sabah

It is clear from these quotes that both the D of E assessor and other students in the group had a role in Olivia and Sabah's experiences although how this then relates to their representations of geographical knowledge is less clear. The way in which the students tell their stories reflects the messiness of the real world; they are rich in places, scant in others and interweave and intertwine while rarely focusing on the representations themselves. While this consequently presents a challenge of organisation and explanation within the confines of this thesis, it is a valuable finding as it provides insight into how the students' stories are represented. It also frames the context in which the other findings within this chapter must be considered.

### 11.3 The stories that are told through critical incident charts

As Section 11.2 highlights, how the students told their stories through the different methods was interesting in itself. However, the inherent detail in the interviews meant that I have have used this data extensively. In contrast, the critical incident charts were effective in providing something to focus the students' minds in preparation for the interview yet, they largely remain in the background throughout Chapters 10 and 12. Therefore, in this section I take the opportunity to foreground the critical incident charts (Figures 11.1 to 11.8) and to explore the stories which emerge.

The students naturally talked through each incident as they were creating their charts and I have captured some of this commentary in the annotations to Figures 11.1 to

11.8. It is important to note that the charts were the only method that attempted to organise the students' stories into some sort of temporal chronology. The written statements, collages and interviews captured students' representations at a singular and contemporary point. The charts, on the other hand, asked students to consider their geographical journey, albeit one which was fragmented and discontinuous.

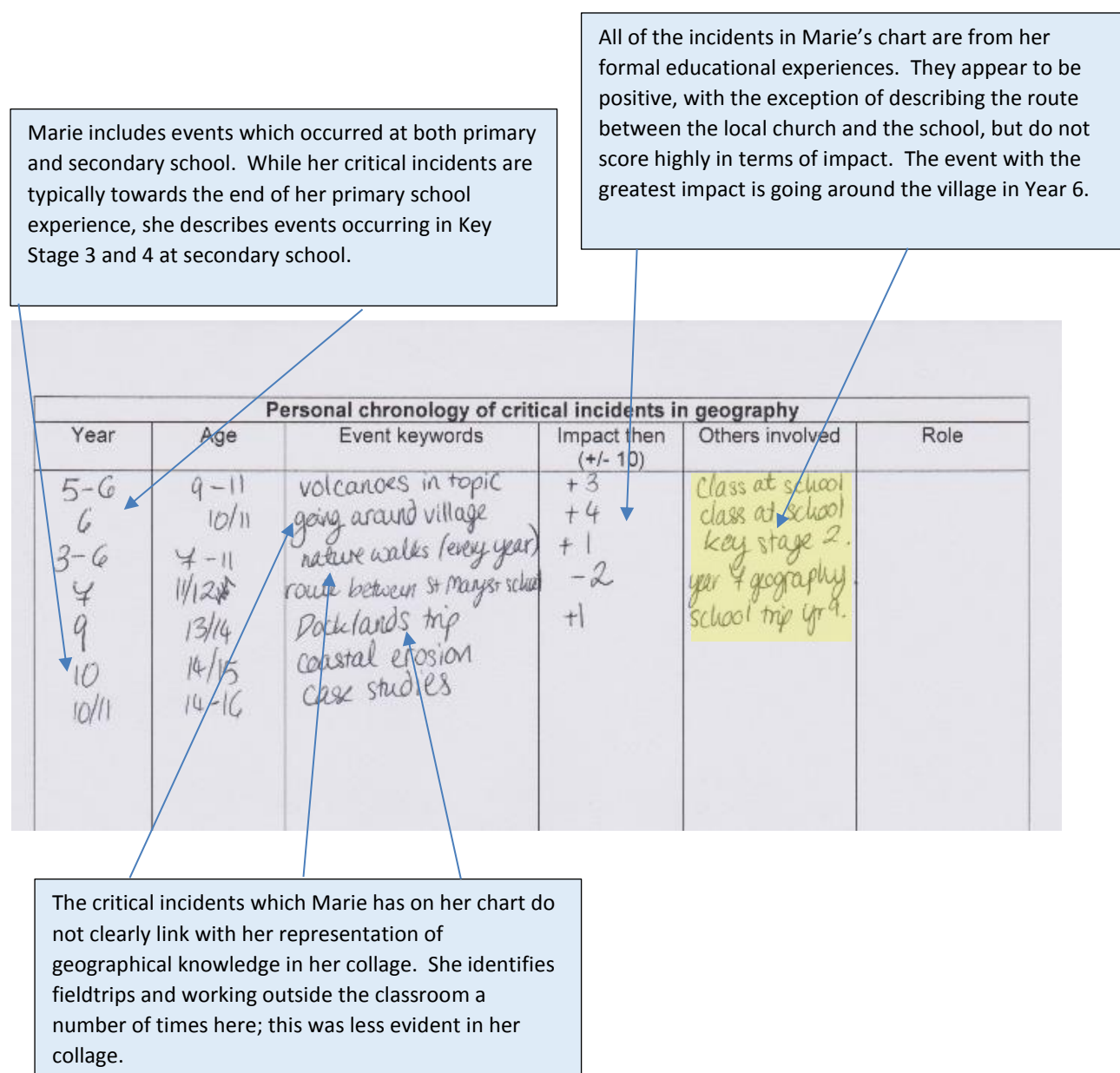


Figure 11.1 Marie's critical incident chart

It is interesting that Naomi includes the word 'inquisitive' in her visit to the Blue Pool. She described this vividly as she was creating the critical incident chart and the event clearly was important – maybe because it was one of her earlier memories.

Naomi has a mixture of formal and informal experiences. The informal experiences occur when she is relatively young – aged 5 / 6 – while the formal experiences are more recent and selective. She identifies primary school geography and GCSE geography coursework but her descriptions lack detail.

Year	Age	Event keywords	Impact then (+/- 10)	Others involved	Role
2002	5/6	Blue Pool - inquisitive	+2	family	Teachers.
2007	10/11	Primary school geography	+2	Teachers	to teach
2012	15	Geography coursework	-2	School	.

Despite describing her enjoyment of geography in her interview, Naomi only identifies one event in her secondary education as critical and attaches a negative score to it. The events which she includes do not seem to have had a significant impact – she scores all of them as + / - 2.

Figure 11.2 Naomi's critical incident chart

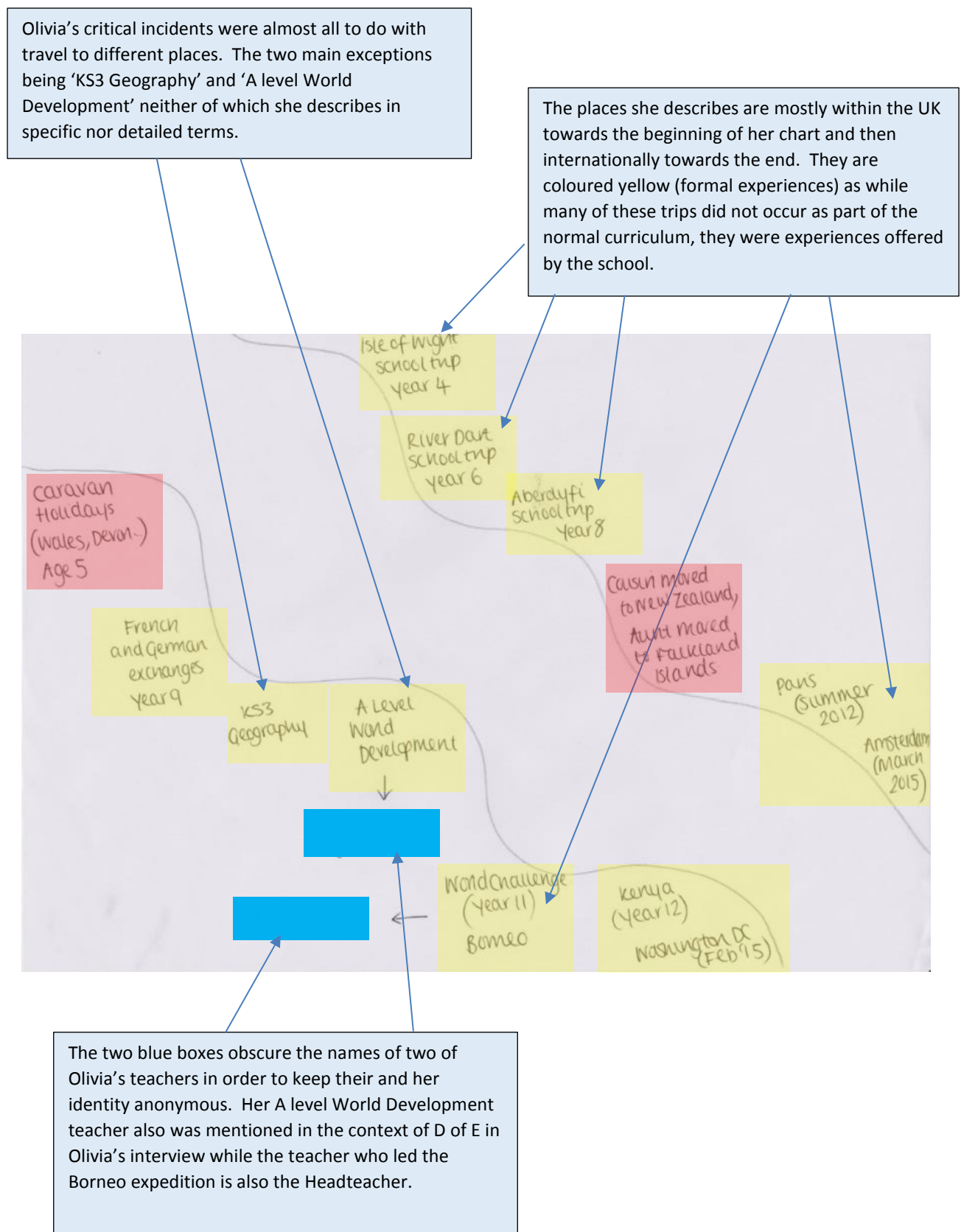
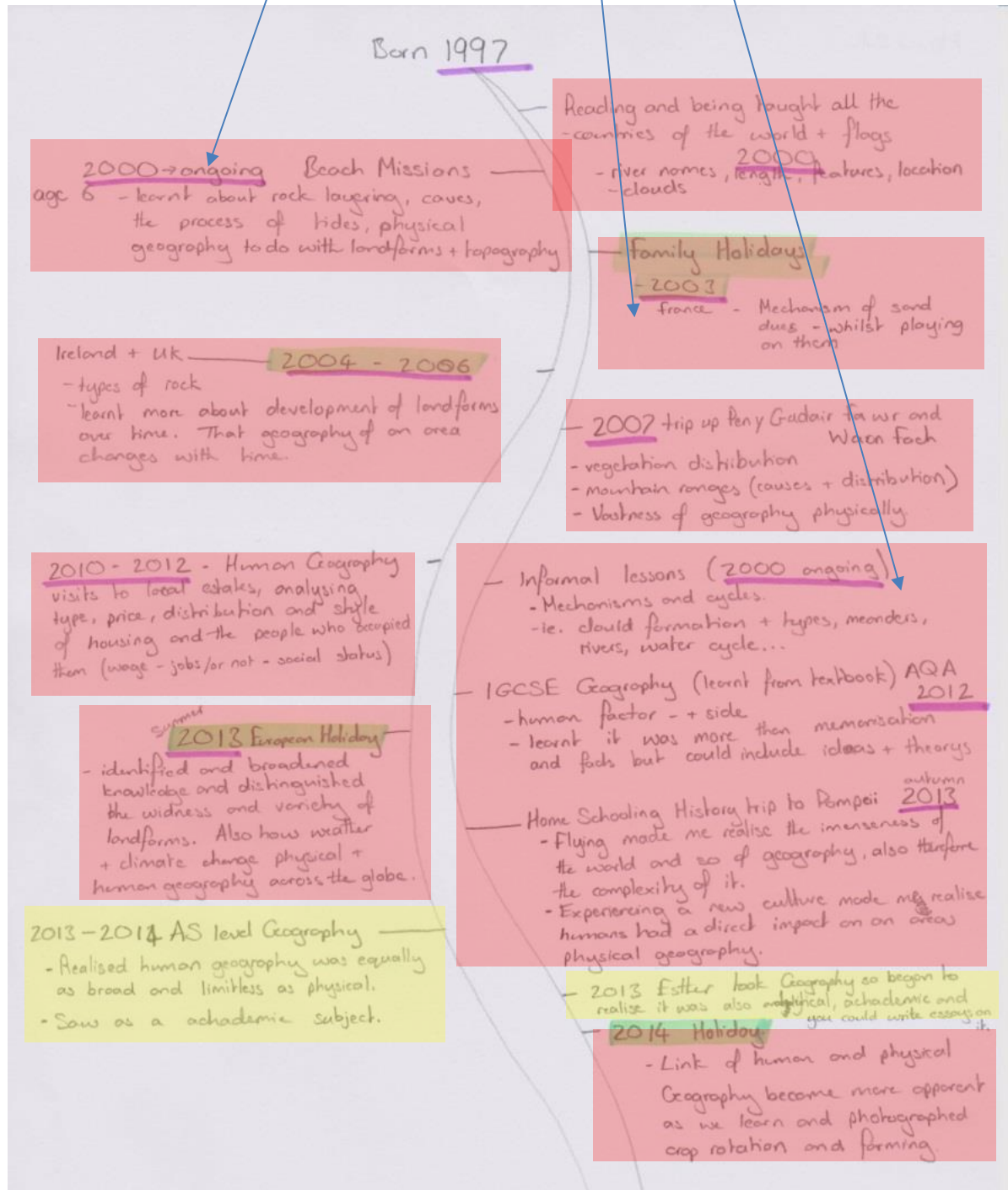


Figure 11.3 Olivia's critical incident chart

Philippa's critical incident chart is dominated by informal experiences given that, until the age of 16, she was home educated. Nevertheless, there is a variable structure to these informal events with some, such as beach missions and holiday, being less structured than her IGCSE studies or the home school trip to Pompeii.



#### 10.4 Philippa's critical incident chart



She mentions a number of events, all of which are positive and all of which seem to have had a relatively significant impact – the lowest score is +7.

Qabilah's chart has a mixture of informal and formal experiences. Generally, the informal experiences occur when she is relatively young while the formal experiences are more recent.

Year	Age	Event keywords	Impact then (+/- 10)	Others involved	Role
2005	6/7	Testing on capitals biggest cities ↳ specific Bangladesh	+8	Father	Initiated interest
2009/10	10/11	Trip to River Ouse → meanders ↳ River Nile project	+8 +9	School (primary) "	Further emphasised my enthusiasm Very enjoyable
2010-2015	11+	watching news for both UK channel and Bangladesh	+7	Home	Increased awareness
2013	14	Travelled to Bangladesh with family + Dubai	+10	Family	Make connections
2010	12	Project on adaptations to environments	+8	School	contrast
2011	14	South Africa Topic gapfinder	+10		Consolidated more interest confirmed my passion.
2013/15	15/16	GCSE - Mrs ↳ Junior Leuten Hall documentation	+10		Reinforced interest ↳ passed Exams
2014/2015	17	A level	+10		

It is interesting that Qabilah has a critical incident chart which highlights places – particularly as both her collage and her interview do not place much emphasis on this aspect. For example, she describes learning capital cities, a trip to the River Ouse, a project on the river Nile and her familial links to Bangladesh.

Qabilah mentions the name of Claytons here which is why this section is obscured. She is also the only student to discuss the role of various actors in the events in any great detail. For example, she explains that the visits to Bangladesh and her Year 8 project on adaptation has enabled her to make connections and to identify contrasts.

### 10.5 Qabilah's critical incident chart

The first critical incident on Rosie's chart is learning the different countries, flags and capital cities.

Rosie's critical incidents are dominated by informal events. The only formal events she describes are trips to the history museum and cultural awareness activities at her international school.

Year	Age	Event keywords	Impact then (+/- 10)	Others involved	Role
1?	5	Learnt about different countries, their flags and capital cities.	6	Mum, Dad	Telling me about the places they've been to
4	8	History museum visits several times a year, watching how technology changed people's lives. School had a lot of cultural awareness activities. My mum would often tell me about	8	Mum, School	Learnt a lot about human geography and became very interested in it
7	11	Realised there was a difference between human and physical geography	3	Mum	

Rosie says that she learnt a lot about human geography and became interested in it. She appears to equate human geography here with the cultural awareness activities at her international school.

### 11.6 Rosie's critical incident chart



Sabah is the only student to display a dramatic variation in the way that she feels about events and the impact that these have on her. Some are positive and have a large impact – Calcutta, adaptations and deserts – some are positive and have a small impact – volcanoes and South Africa – some are negative and have a large impact – the water cycle and Coombe Hill – while others are negative and have a small impact – cities project.

Sabah's critical incident chart is dominated by formal experiences. The only informal experience occurs aged 9 when she learns about Calcutta and differences in culture, lifestyle and physical aspects from her friends and parents of friends.

Year	Age	Event keywords	Impact then (+/- 10)	Others involved	Role
2008	9	Calcutta, differences, culture, lifestyle, physical aspects	+ 9	Friends - Parents of Friends	Assembly Organiser
2008	10	Water cycle	- 8	Teacher	
2010	11	Australia, climate	+ 6	Teacher Friends	
2011	12	Adaptations, canals, deserts	+ 8 + 9	Teacher	
2011	12	Egypt	+ 2		
2012	13	Volcanoes	+ 6		
2012/13	12/13	Floods in Pakistan	+ 1		
2012	13	South Africa	- 3		
2012	13	Cities project	- 8		
2012	13	Coombe Hill			
2015	17	Inter-ailing			

Sabah mentions several places in her critical incident chart which is interesting given that neither her collage nor her interview particularly emphasise this. For example, she mentions Calcutta, Australia, Egypt, Pakistan, South Africa and Coombe Hill.

Figure 11.7 Sabah's critical incident chart

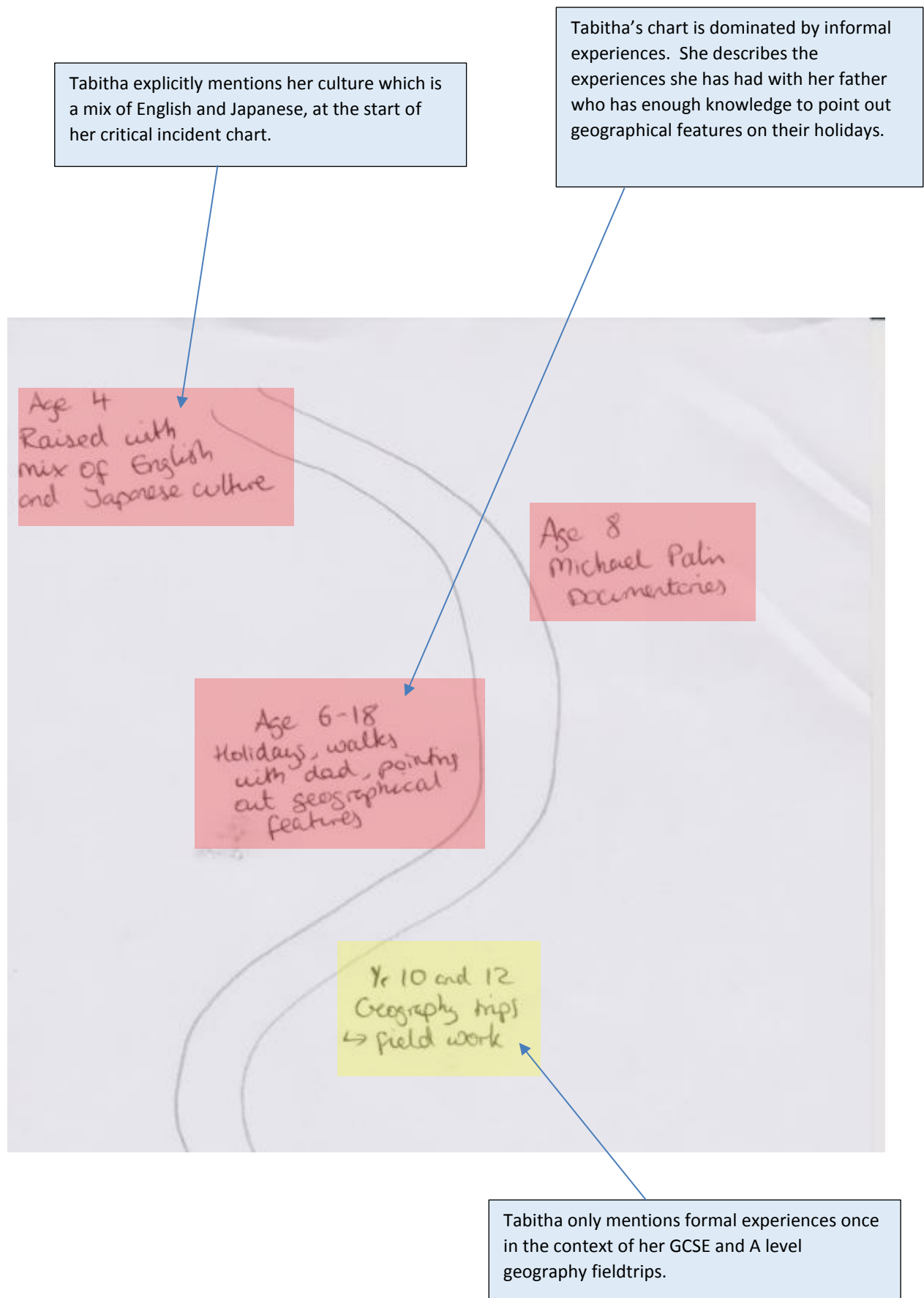


Figure 11.8 Tabitha's critical incident chart

Unlike the collages, where images from formal experiences appear to dominate, the critical incident charts documented a fairly equal range of both formal and informal geographical incidents. All of the students, with one exception, incorporated this range and it was interesting that the student who only highlighted formal experiences in her chart was Marie, the same student who had only highlighted informal experiences in her collage. Perhaps she thought that her school experiences were important and was overcompensating in her chart for the fact they were missing from her collage? Alternatively, it may be a feature of the task. Marie chose to complete the table rather than the diagram of a meandering river which is similar to an exercise which she might attempt during one of her lessons. It may be that this structure encouraged her to consider more formal experiences over informal ones. While both these explanations are likely, I favour a third which overlaps with and also complements my finding in Section 10.6. If student representations of geographical knowledge are different given different methods then, while there is some congruence and overlap, it is unsurprising that the stories which relate to these representations are also different.

A mixture of both formal and informal experiences were evident in the majority of charts and yet, with the exception of Rosie, the most recent experiences tended to be those which were formal. For example, Qabilah highlighted the South Africa topic she had studied in Year 9 as well as her GCSE and A level studies more generally while Sabah included a number of topics studied at Key Stage 3 including Australia, climate and volcanoes. Several interesting points emerge from Sabah's chart in particular. Firstly, despite Sabah putting together many of her Key Stage 3 experiences in the time when she was aged 12 and 13, there seems to be a difference in her feelings of her Year 7 and 8 experiences compared with those from Year 9. All of the topics to which she assigns a positive impact score are those from the beginning of Key Stage 3 while she sees the topics from Year 9, which crucially coincides with the GCSE options process, as negative or as having less impact. Sabah had the same teacher in Year 7 and 8 and then a different teacher in Year 9 which may account for this difference. Equally, it may be that she felt these topics were less useful, something which was a recurring theme throughout her interview. It is also interesting that the topics that she views more positively either have a clear link to the science subjects that she subsequently chose to study to A level or have a relevance to her in some other way. Sabah identifies as being of Pakistani ethnicity and identifies 'flooding in

Pakistan' – a case study from Year 8 - as a critical incident. However, it is also interesting that she assigns this a lower impact score than other topics such as adaptations and deserts (which also feature on her collage – Figure 10.7). This suggests that formal experiences of geography which resonate with students' identity, and in this case ethnicity, are particularly important in shaping views of geographical knowledge.

Coupled with this, because the focus of the charts was on critical incidents many of the formal experiences tended to manifest themselves in one off events such as school trips and specifically, fieldwork excursions. For example, Tabitha includes the fieldtrips she went on for GCSE and AS level, Marie highlights a trip to Docklands and Qabilah specifically picks out the field centre which was visited for her GCSE controlled assessment. Sabah also highlights the Year 8 fieldtrip to Coombe Hill which is particularly noteworthy given the high negative score which she attached to it. With this exception it is unclear from the charts alone how the students feel about fieldwork. However, in their commentary of their charts and in their interviews the overwhelming response to geography fieldwork was at best lukewarm and at worst distinctly negative.

*'I think, well, the weather was a part. The fact that it was away was a part. I think it was a pretty long coach journey, that wasn't nice. So we were already tired by the time we were there. We weren't interested and, as a group, because I remember I was in a group with people I wouldn't have chosen to go with either...and that always makes something worse.'*

Marie

*'Well to be honest, I don't like going outside anyway, but I feel like, well I feel like a lot of things in the field are useless anyway...someone was telling me how they measured the depth of the river at different points. I don't feel that that's a very worthy use of time.'*

Sabah

An interesting feature here is that while Marie and Sabah describe their fieldwork experiences as negative they do so for different reasons. Marie highlights extraneous

factors such as the weather, the journey and the people she was working with while Sabah articulates her dislike of fieldwork fundamentally. This focus on fieldwork and trips in the charts is particularly interesting given that it does not feature at all in either the students' collages or written statements. Perhaps this is unsurprising given that students appear to see fieldwork as an incident or an event rather than in terms of the geographical knowledge being studied. Rather than highlighting the topic or concept – for example, coasts fieldwork or ecosystems fieldwork – they refer to the experience by its location; Coombe Hill, Docklands and Juniper Hall are specifically mentioned.

The second finding which has emerged from this research question then, is that recent formal experiences of geography appear to be critical and fieldwork is an important element of this. However, it is also important to examine those informal experiences which students include in their charts, particularly as those which occur within their early years appear to be important. The first thing to note about these informal incidents is their personal nature. The experiences from formal schooling tend to be those which appear on multiple students' charts. With a curriculum that remains broadly the same from year to year and around 180 students in each year group it is consequently unsurprising that the South Africa topic from Year 9, for example, appears on both Qabilah and Sabah's chart. However, the informal experiences appear more unique to the individual which arguably may be a feature of the level of description which students use in documenting these incidents. Often, specific people or places are mentioned in conjunction with the experience. For example, Tabitha describes holidays and walks with her dad during which he would point out geographical features, while Qabilah includes her father testing her on the capital and major cities of countries, specifically Bangladesh.

In addition to this, there are two further points to note regarding the informal experiences detailed in the students' critical incident charts. The first is the explicit reference to ethnicity which is arguably more visible in this method than any other. Tabitha mentions her upbringing in a mix of British and Japanese culture, something which is likely to remain important throughout her life but which she chooses to put at the beginning of her diagram; maybe because it underpins other critical incidents or maybe because this is the age at which she first became aware of it. Similarly, Qabilah mentions Bangladesh on three separate occasions; in relation to her father testing her

on major cities, her travels to visit family and in her comparison of it with other places and events featured on the news. The students were aware that my research interests included a focus on ethnicity which is possibly why some students have mentioned this (Appendices 7.iv and 7.vi). However, it is also interesting that other students who are White British and who had access to the same information, did not; possibly because to them ethnicity is a 'given'.

A second interesting point regarding these informal experiences lies at the intersection of students' social status and ability and which appears to cut across ethnicity. Many of the informal incidents which students describe are embedded in a culture which sees education as important and where time and money is invested at a young age to develop potential. Students mention visits to museums, the watching of documentaries, the explicit testing of knowledge of capitals and flags and many and varied holidays which are seen, in this context at least, as an opportunity for learning rather than a relaxing break from normal life. Perhaps this last example is a little unfair given the focus of the exercise on geographical knowledge. However, it would be interesting to see whether or not students from homes with less social capital placed similar emphases on informal experiences such as these.

#### 11.4 Formal experiences of geography: primary school

Although most of the formal experiences in the critical incident charts were from secondary school, some of the students did also mention experiences from primary school. For example, Naomi mentioned primary school generally, Rosie highlighted cultural awareness days at her international primary school and Marie noted a volcanoes project and nature walks which occurred every year throughout Key Stage 2<sup>111</sup>. Similarly, in their interviews, most students could remember some aspects of geography that they had studied at primary school and these tended to focus on both places and themes. Olivia, Tabitha and Sabah remembered doing country studies and mentioned Calcutta, Bhutan and tourism in St. Lucia as particular examples. They

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<sup>111</sup> Key Stage 2 incorporates Year 3, 4, 5 and 6 (ages 7 – 11) at primary school.

appeared to enjoy these; Sabah describing these experiences as *'more relevant'* because they contrasted with her lived experience and Olivia describing the sense of looking to the wider world as *'fascinating'*. Distant places outside students' direct experience can provide 'awe and wonder', they stimulate geographical imaginations and are experiential. Therefore, this interest in other places is perhaps unsurprising and has resulted in students being able to recall these experiences many years afterwards.

The themes that the students identified in their interviews were almost exclusively physical geography topics and both Qabilah and Rosie commented that there was little human geography in their primary curriculums.

*'No, no human geography really. Maybe a couple of physical processes, I think they were easier to teach or something.'*

Rosie

*'And then human geography wise...we looked a bit at cities...but I think that we did focus more on the physical geography.'*

Qabilah

As Rosie suggests, primary school teachers, many of whom are non-specialists, may feel more comfortable with physical topics which overlap with other subjects such as science. It is also likely that topics, such as rivers which have featured in primary school curricula for many years, have a well-developed bank of resources for teachers to use in their teaching.

The physical geography topics that were mentioned by students included rivers, the water cycle and volcanoes. Sabah and Tabitha both described their experiences of studying the water cycle, something which Sabah in particular did not enjoy.

*'Well the water cycle was just horrible...It didn't really matter as much to me.'*

Sabah

She does not elaborate on this point and so it is difficult to determine whether this reaction was to the topic, how it was taught or some other issues or incident that she associated with it. The water cycle does also make an appearance on her critical incident chart as something that has a very significant and negative impact on her view of geography (her score was -8). This notion of relevance, which I explore more fully in Chapter 12, is interesting in this context as it appears that Sabah does not think the water cycle as a system matters to her. Yet, her collage contains an image of flooding which is inherently bound up with the water cycle and is arguably important, if not to Sabah personally and individually then to people more generally.

A third finding of this research question then is that, in the primary geography experiences that the students could remember, physical geography seemed to be tackled in a thematic way, while human geography appeared to be covered in a placeist way. What is interesting however, is that the students did not appear to recognise or acknowledge that human geography was being taught through the medium of place, suggesting instead that they experienced little human geography.

In addition to the content which was studied, students also commented on the ways in which geography was taught at primary school. While some of the physical geography content was delivered by the teacher and explicit links to other subjects, particularly science, were made, when it came to learning about places students were encouraged to be more independent. They were, in some cases, allowed to pick the country they were to study and generally were able to research the things that they found interesting, something that they seemed to enjoy.

*'I remember that I wanted to pick a country that I'd never heard of and just do something really obscure...I think I liked the researching...being set it as a task to research yourself is more interesting than having a presentation.'*

Tabitha

*'Like I'd do my research type things...it was a bit different compared to other stuff...I remember looking on the internet which we didn't do in other subjects.'*

Olivia



These observations highlight that the way in which place was taught at primary school encouraged students to be independent. They noticed the difference between the pedagogy of other subjects and geography and enjoyed the freedom of choice that this gave them.

A final point to make in this section is that topics that students remembered studying at primary school did not tend to feature in their collages. It did not seem to matter whether the experiences were positive or negative ones, they seemed removed from their contemporary image-based representations. This is despite references to primary school being made in both the critical incident charts and interviews. Again, this supports my findings in Section 10.6 which argues that different representations produce different views of geography. However, the reasons behind this in this instance could be due to geographical content being described as topic work - few students described lessons at primary school that were explicitly labelled as geography - or simply that students' more recent memories were dominant.

### 11.5 Formal experiences of geography: secondary school

Students' memories of their secondary school experiences were generally described more clearly; they were more recent and vivid. Students typically compartmentalised their experiences into the three Key Stages as these corresponded with both their choices about whether or not to study geography further and the different curricula which were studied at each stage. Despite being fairly clear about the geography which she had studied at primary school, it was at KS3 when content was organised into distinct subjects that Qabilah felt the subject developed its own identity. Rosie also commented that at the beginning of KS3 was the first time that she started to see geography as academic.

*'Well before that [in primary school] I didn't see geography as an academic subject. We just hadn't done enough of it and we hadn't covered anything in enough depth.'*

Rosie

In many primary schools geography is often branded as 'topic' and relegated in both status and time; less important than literacy and numeracy and more difficult for non-specialists to teach than history. This contrasts with the humanities department at Claytons where teachers teach within their subject specialisms – all of the geography classes from KS3 to KS5 are taught by geographers – something that is increasingly rare in secondary schools (Department for Education, 2016a). It is also worth remembering that Rosie had gone from a mixed ability primary school to a highly selective secondary school and, given this, it is unsurprising that she saw geography as being more academic in this context.

The two students who had not studied geography past the end of Year 9, Olivia and Sabah, represented very different views of geography within their collages which they explained with very different stories, and yet there were similarities between the two. It appeared that both seemed quite removed from their formal studies of the subject and so they explained their view of geographical knowledge in terms of the subjects that they both felt confident in and which overlapped most with geography. Olivia connected with the aspects which overlapped with her A level in World Development while Sabah linked her ideas to biology.

*'I think that maybe I'd put a bit more emphasis on the development side of it... From World Development I loved the poverty aspect and learning about all the different groups like CAMFED and the women's groups and things and sort of the top down, oh this is maybe bringing in too many at once, but the development aspects of poverty, the top down and bottom up development and the grass roots activity.'*

Olivia

*'In biology in Year 11 we did a topic which was about geography and biology and how they work together, and the environment. So I put a lot of that stuff on [my collage] like biogas chambers and bio diesel production and, that was in chemistry actually and how people are using, people who grow crops for fuel are now using, for food are now using it for fuel which means there's a food shortage...and then I did global warming and the icebergs melting.'*

Sabah

This illustrates the synthesis between geography and other subjects was clear in both students' interviews. While other students also showed an element of synthesis it was more apparent in Olivia and Sabah's possibly because they did not have more recent, formal experiences of geography to draw on.

An interesting point emerged from the interviews of the three students, Marie, Naomi and Rosie, who had studied geography formally to GCSE level. These were focused on the lack of place knowledge which was required for this level and also on the role of the teacher. Marie, in particular, described how she felt that geography at KS3 was common sense and she was surprised that knowing where things are, what Lambert (2011) describes as geography's vocabulary, was not a feature at GCSE level.

*'I think from taking it at GCSE I was shocked how little you need to know where stuff is. Highlighted by my friend sticking up her hand asking where Africa was...I understand that, if you're doing a case study you should know where the place is and if you're doing the weather or something, if you know the country you're talking about is on the equator you're going to be able to talk about it a lot more. And if you know that it's coastal and it's the sea and that sort of thing. Whereas I think that just being able to say where every country is isn't that important.'*

Marie

Philippa, Qabilah and Rosie, all students who took geography to either GCSE or A level, highlighted the learning of capital cities and countries in their critical incident charts. However, here Marie highlights an important distinction between knowing information about places for the sake of it and knowing where things are to have a deeper understanding of a concept. Marie went on in her interview to explain that this former knowledge was useless, as unless it had deeper meaning or was rooted in experience, for example it was somewhere where you had travelled, then it was likely to be forgotten. This view is similar to that of Sara in Hopwood who suggests that geography is 'less about where things are...and more about what different places are like' (2012: 141)<sup>112</sup>. As explained in Chapter 10, the GCSE geography course studied

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<sup>112</sup> This view contrasts with other case study students in Hopwood (2012) who see place in terms of where things are and focus on location and spatial patterns.

at Clayton's is organised thematically. It is therefore unsurprising that Rosie and Naomi both had collages, and to a lesser extent interviews, which were distinctly thematic. What is perhaps more interesting given the categorisation of Marie's collage and interview as placeist and her questionnaire as thematicist, in that places appear important in her view of geographical knowledge although they seem set within a thematic framework.

Those students who had studied geography to A level tended to represent geographical knowledge as interactionist, a finding explained in more detail within Section 10.4. However, it was also interesting that Philippa, Qabilah and Tabitha were also the only students who explicitly highlighted the vastness and breadth of geographical knowledge.

*Like, mechanisms, there's absolutely millions of them but I couldn't put them all on, and like weather is just one example of physical, but there's also loads of others. And then human wise, there's just loads!*

Philippa

*'It's also kind of made me aware of how vast geography is and how many geographical things there are in the world...it does cover so many other topics and aspects and it can overlap with so many different sorts of subjects. You wouldn't think it would but it does.'*

Qabilah

*'I'm trying to think of things that wouldn't work in geography, because it's so broad and you can sort of twist everything to make it geographical.'*

Tabitha

It is likely that this broad view of the subject comes simply from the fact that these are the students who have studied it for the longest. At Clayton's, unlike in many other secondary schools, geography is not taught as a spiral curriculum - where topics are repeated, sometimes in every Key Stage and increase in difficulty - and it is likely that students who reach A level will have studied around 30 separate topics. However, viewing these topics in an interactionist way, where they are not discrete but instead

are linked, is likely to make geography appear more complex. In addition, if students are able to make links between topics that are taught within the geography curriculum then arguably, they are likely to make links with other aspects of the subject which they may not have been formally taught. It is therefore unsurprising that they describe the subject in these terms.

These observations must be seen in the context of the findings and subsequent theorising in Chapter 10, specifically that views of geographical knowledge appear to be different given different methods and that representations contain aspects of many categorisations albeit in varying amounts. However, a fourth finding which emerges from these stories is that students appear to have different frameworks for structuring their view of geographical knowledge which are dependent upon the stage at which they gave up their formal studies. While these frameworks vary in their dominance and are in many cases different to the categorisations assigned to their representations, it appears that for students finishing the subject at the end of Year 9 their framework is one of synthesis. Those students who finish their studies at the end of Year 11 and GCSE tend to have a thematicist framework, while those who have continued their studies to A level tend to have an interactionist framework. However, it is important to explain that this finding is likely to be a feature of my methods. Students who had given up their studies of geography three or four years prior to my research were possibly more likely to draw on their contemporary experiences of subjects they were studying and which they saw as overlapping with geography. It would be interesting to carry out the same research with Year 10 students who had more recently given up the subject as I suspect this underlying synthesis would be less noticeable.

## 11.6 Informal experiences of geography

In contrast to the findings of Hawkey and Prior (2011) (see Section 11.8), informal experiences of geography were, for the most part, not as dominant as formal experiences in students' representations. As explained in Section 10.4 and 11.3, informal experiences did not often appear in the detail in the collages, although they sometimes provided an overarching framework and they tended to appear at the start

of students' critical incident charts but not as much towards the end. Nevertheless, it is worth spending a little time focusing on these informal experiences, particularly as they appear to have an important bearing on the potential careers that interested the students and the place of geography within this which is discussed more fully in Section 12.5. It is also an opportunity to explicitly highlight the role of intersectionality, as the informal experiences which students mentioned are a product of them having social capital; a combination of high socio-economic status and ability, which values educational experiences.

The influence of the family, and particularly parents, was important in this regard.<sup>113</sup> However, with the exception of Philippa and to a lesser extent Rosie and Marie, experiences which involved the father were mentioned more than those with the mother. Often this was in the context of discussions regarding potential careers where the students appeared to consult their fathers rather than their mothers.

*'All the time I used to be quite obsessed by what can I do when I'm older and just talking, "I'm interested in this, I enjoy this", and my dad would say "what about law", and I must have started researching it and thought I was quite interested in it.'*

Olivia

However, in other cases the fathers were mentioned as providing experiences which may have shaped the students' view of geographical knowledge. For example, Tabitha mentions walks and also the watching of Michael Palin documentaries on her critical incident chart which she used to do with her father and both Qabilah and Rosie highlight that their fathers were involved in helping them to learn where countries and capital cities were located when they were very young. While these experiences are not reflected in the collages or even discussed in any great depth during the interviews, the students felt it important to mention.

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<sup>113</sup> It is important to note here that all of the students had parents who were married and lived together. According to the Office for National Statistics (2015), over one third of marriages end in divorce and so not to have any examples of this within the case study students is perhaps surprising. However, the findings in this section should be read within this context.

As a mother of three boys, my relationship with my sons blossomed when they started school. Prior to this I found it difficult to play for hours with cars or to discuss the different dinosaurs they were obsessed with. However, I felt on firmer ground when I could help them with their reading or listen to the lines they had to learn for a play; things that I was both interested in and which were within my comfort zone. I suspect that this may be behind the dominance of the fathers within the students' discourse. As girls they have these experiences with their fathers because this is where their fathers feel comfortable; discussing careers, going on walks, watching documentaries and learning factual information. Coupled with this, Philippa, Rosie, Marie and Naomi are the only students to mention their mothers at any point and the focus of their experiences tends to be culturally referenced. Due to Philippa being home educated, her relationship with her mother is perhaps more complex than the others and I have discussed this in more detail in the following section. However, Rosie talks of her mother taking her to history museums and discussing cultural awareness while both Marie and Naomi discuss relationships which their mothers have with other cultures; Marie's mother and her American family and Naomi's mother's German pen-friend.

It is interesting that, other than parents, the students rarely mention other people and when they do, they appear to have quite specific roles. For example, Tabitha and Philippa are the only students to mention siblings and for both it is in the context of older siblings treading a path which they expect to follow. Philippa explained that her sister attended school and went travelling first and so she found the thought of doing both of these things much easier, while Tabitha was looking towards what she was going to study at university when she was doing her GCSEs.

*'I looked into some things because my sister like when she was applying for university she had all the prospectuses and things so I just flicked through them. Because I guess having an older sibling you're always looking ahead, I guess just because they're always that step ahead. You know what's coming so you're kind of looking into it a bit more.'*

Tabitha

Again, it was difficult to tie these ideas and experiences directly to the students' representations of geographical knowledge as such references seemed more focused

on the place of geography within a particular trajectory rather than the form which this geography took.

In contrast, it was more straightforward to identify the influence of friends in this regard and while most students did not mention the influence of friends at all, three students – Marie, Olivia and Sabah – mentioned them prolifically. In the case of Olivia and Sabah, the two students who had not studied geography beyond KS3, they drew on things that their friends had told them about geography. For Sabah, her friends had told her that they studied physical and human geography and so her collage had this overarching framework (see Section 10.4), while Olivia was aware that her different groups of friends saw geography in different ways according to their gender.

*'...and I've got friends both here and at the \_\_\_\_\_ (neighbouring school) that do it [geography]....It's interesting to see the difference between the girls' perceptions and the boys. I think that maybe, I don't want to be stereotypical but, maybe the boys, I think it's maybe more their sort of thing...I've got friends here [girls] that do it [geography] and they find it a massive challenge with all the trips to Devon and doing the investigations and things like that, don't really enjoy it, would rather sit and learn and write an essay. Whereas my boyfriend's at the \_\_\_\_\_ (neighbouring school) he loves going on all these trips and like doing all the investigation and analysis and like being outside and it's all fine.'*

Olivia

This observation by Olivia is particularly interesting given my intersectional framework as it highlights how she views fieldwork in different ways for high-ability students of different genders. However, it is also unsurprising given the feminist critique of fieldwork (see Section 10.8).

Marie also mentions friends (and parents of friends) in two different contexts; in terms of the hobbies and extra-curricular activities they engage in and in terms of the geography stereotypes that pervade.



*'I remember taking it [geography] and quite a lot of my friends took history and they always joked that geography was the colouring in subject. Like always!...My friends' parents will say that [it's colouring in] 'cos they didn't choose to take it [geography] and I did.'*

Marie

This simplistic and stereotypical view of the subject is perhaps to be expected given my observations in the first phase of research discussed in the conclusion to Chapter 7. However, it is interesting that this is only once mentioned in the second phase and it is a passing observation from a friend rather than one which features within the representations of geographical knowledge.

Perspective influence theory which was used as a stimulus for some of the questions during the interview and then used as a framework for analysis (Chapter 8) mentions media and travel in addition to people who may have an influence on students' representations of geography. While travel is covered fairly extensively in my discussion of Olivia's representations (see Sections 10.4, 10.6 and Figure 11.3) it is worth pausing here to consider the influence of media – books, newspapers, television and the internet – more generally. Media was only explicitly mentioned by three students, Philippa, Tabitha and Sabah. Again, I explore Philippa's relationship with media in more detail in her case study (see Section 11.7) but Tabitha and Sabah's comments were interesting as they both referred to documentaries which they had watched on topics that they were interested in. For Tabitha, this had piqued her interest in the natural world which is something that she wanted to study further at university, while Sabah acknowledged that the scientific documentaries that she was interested overlapped with her view of geographical knowledge and were therefore included on her collage (Figures 10.7 and 11.8). However, what was perhaps more interesting was the implicit role of media on students' views. Olivia, Philippa and Tabitha chose to use printed images on their collages and while a couple of the pictures had been taken by Olivia, the majority had been selected from those available on the internet. How Philippa and Tabitha chose their images is unclear, but Olivia explained as she was constructing her collage that she had put 'geography' into the web-based search engine Google, and then printed out those images that she felt fitted with her view. It therefore appears that media, and specifically the internet, has

an important role to play in shaping students' views although they may not be aware of this.

A fifth finding of this research then is that informal experiences appear to have an important, but not always explicit or straightforwardly definable influence on student representations. It is perhaps for this reason that formal experiences seem to dominate as they are more tangible to students and, albeit from different perspectives, a shared experience.

### 11.7 Case study: Philippa

In the same way that the inclusion of Qabilah as a case study in Chapter 10 provided a detailed description of her representations of geographical knowledge, here the inclusion of Philippa as a case study has a similar aim; to tell the story of one of the students in depth to add detail. While other students could have been chosen to meet this aim, Philippa offered a very different perspective to the others. As a home educated student she had not experienced 'formal' education in the traditional sense of the word until she attended Claytons at the age of 16. Given that this chapter focuses on students' informal and formal experiences, Philippa tells a relatively unusual story which is interesting to compare to those of the other students.

Philippa was a Year 13 student who stated that her ethnicity was White British. Her faith was a central aspect of her identity; her family were Evangelical Baptists and her parents elders at the local church. The second of four sisters, all had been home educated and Philippa and her older sister had then transferred to Claytons for their sixth form studies. While she had done some travelling with her family in the UK, Ireland and Europe she was planning on engaging in missionary work in Thailand during her gap year between school and university. She was quite apprehensive about this but also grateful that her sister had travelled a similar path already in Cambodia.

*'I'm quite excited about learning more about another country. I think I'm frightened, 'cos I'll go there not knowing about the geography and not knowing their culture, I'll like offend them or something! [laughs]...I know it can be done, which probably makes it easier.'*

Philippa

It is interesting here that Philippa appears to not equate culture with geography, particularly as she later explains in the interview that she did not realise that this was an aspect of the subject until she started studying the IGCSE syllabus.

Philippa was studying biology, chemistry, physics and Latin for A level and had studied geography the previous year for her AS levels. She was keen to study optometry at university and explained that this was partly because she had been fascinated by human biology from a young age and partly because she wanted a career that would allow her to help people. Although no-one in her immediate family had a medical background – her father had studied maths and her mother art at university - her older sister had just started a degree in audiology and her family had recently nursed her grandfather through a long illness.

Philippa was able to describe her experiences of geography clearly and her critical incident chart is by far the most detailed of all the students. She was able to be quite specific about the aspects of geographical knowledge which she attached to particular experiences although in a similar way to other students, the explicit links between her experiences and her representations were unclear. For example, she was able to describe her learning about the formation of caves on various beach missions she had undertaken while on holiday but did not then go a stage further to explain whether or how this had influenced her view of geographical knowledge.

Philippa's early experiences were largely informal and led by her parents, particularly her mother. While her father was at work the family would go on walks to toddler group, the local allotments and the library. Philippa described these as 'fieldtrips' – although she also said they were not purposeful or formal - as her mother would simply point out interesting things on the way which they would then talk about.

In addition to these informal fieldtrips which occurred from a young age – Philippa suggests from the age of three on her critical incident chart – the family also engaged in more structured learning outside the classroom while on holiday. These experiences tended to focus on physical geography and would be wrapped up in play which made them enjoyable. Philippa described learning about the mechanisms which create sand dunes while playing on them and going on beach missions to learn about rock layering and tidal processes in her critical incident chart. Similarly, in her interview she gave the following example:

*‘We used to be on holiday, so then we’d go walking up a river looking for the source or something and then we’d go, ‘this is a meander’ and ‘look at that!’ and you’d like wade into the river at this point and then go further down the river and wade in and see how much it had got deeper and how much wider it was. So I think a lot of it was exploration that was fieldwork.’*

Philippa

What is particularly interesting about Philippa’s fieldwork experiences, particularly those documented on her critical incident chart, is that she is very clear about the concepts studied and less clear about the location. Indeed, the only location she mentions in these early experiences is Pen y Gadair Fawr and Waon Fach. This contrasts with the fieldwork experiences documented by the other students where location is dominant and concepts are not mentioned. This could be a result of the embedded nature of fieldwork within Philippa’s experience which contrasts with the discrete way in which it is treated as a focus of assessment within the formal school curriculum. It may be that because this was a familiar and regular way in which she learnt geography she was able to focus on what she learnt rather than where she learnt it. This observation is at least partially supported by her omission of fieldwork in her critical incident chart during the time that she was in school. She explained in her interview how she had found her AS level fieldwork less enjoyable than her previous experiences of learning outside the classroom.

*'I didn't enjoy as much the kind of sitting there and doing risk assessments. Probably because it was more the atmosphere and then all the other girls didn't want to do it, and then they all stayed up, doing stuff like the night before so they were really tired...It was also the idea of having to do an exam on it, I was like 'I need to get all these notes otherwise I will fail!' [laughs] It was the pressure and the atmosphere that made me not enjoy it as much.'*

Philippa

Philippa refers to an interesting difference here between the fieldwork which she did at school and that which she did with her parents on holiday which revolves around the process of enquiry. For the purposes of assessment she was required to engage in the complete process at AS level from setting the question and collecting data to presenting, analysing and evaluating her findings. By her own admission, the fieldtrips which she went on with her parents were more focused on observation of phenomena than measurement and analysis – *'the big difference was we actually had instruments and measured things!'* – and they would not usually write up their findings.

The family did not own a television and the girls were not allowed to read newspapers, particularly when they were younger. Consequently, when their informal walks ended up in the library Philippa and her sisters were encouraged to take books home to read. While Philippa sometimes had free rein to choose the library books that interested her, at other times her mother would be a little more prescriptive and constrain her choices within a particular section of the library such as history or natural sciences. Her mother took a very active role in reading and would often link the content of the books to Philippa's own experience and people and places with which she was familiar. For example, the eclectic nature of the congregation at her church meant that there were people she knew who had a variety of cultural backgrounds. Given this, it is unsurprising that links between different geographical concepts are particularly clear and dominant in Philippa's collage. While in Chapter 10 I attribute this to recent formal experiences of geography - particularly AS level which encourages this conceptual linking - it also seems that this way of thinking became natural for Philippa from a very young age as a result of her informal experiences.

Given the apparent importance of formal experiences of geography in students' representations of geographical knowledge it is worth exploring Philippa's experience of formal geography within an informal context in a little more detail. As a home educated student she started taking GCSE exams in the equivalent of Year 7, starting with the sciences and then moving on to maths, ICT, Religious Studies, English and geography. She took two or three exams each year from Year 7 to Year 11, mainly because her parents could only focus on a couple of subjects at once to understand and subsequently teach the content. The specification which was followed was dependent upon not having a coursework element as the assessment of this would have been logistically too difficult and expensive given the circumstances. Therefore, Philippa taught herself IGCSE geography using a textbook.

Philippa highlighted in her critical incident chart and interview that the geographical knowledge which was required for the IGCE exam was very different to that which she had gained through informal experiences previously. For a start there was more of a focus on human geography, something that seemed to come as a surprise.

*'Health did [come as a surprise]. 'Cos I was like "health is not geography, it's biology"...but when you look at it it's like "yeah, this is geography, it's definitely geography, OK so I have to change [my view] now!" That one was a big one. What else? Cultural aspects, the fact that culture kind of has a big impact on the geography of an area, 'cos that would seem more to me like that's got to do with languages.'*

Philippa

This is understandable given that most of Philippa's previous experiences had been largely focused on physical geography processes and mechanisms and it is interesting that her collage reflects both facets of the subject. She also explains in her critical incident chart that embarking upon the IGCSE course made her realise that geography was not just about memorising facts but also included theories. It was more complex than she had previously thought and embraced concepts from both English and maths. Her notion of geography as being a bridge between English and maths was one which she referred to on a number of occasions and also one which she suggested made the subject both interesting and useful (see Chapter 12).

In summary, Philippa's experiences of geography as a home-educated student are interesting to compare to the other students who have had a more conventional upbringing. The way in which she views fieldwork as integrated is different to the views of the other students who see it as additional. Her informal exploration of the physical environment seems to shape her view of geography at a young age, although she is clear that this has changed so that her representations illustrate a range of both physical and human concepts.

### 11.8 A critique of 'History, memory cultures and meaning in the classroom', K. Hawkey and J. Prior (2011)

In the same way that Section 10.9 details a critique of Bar-Gal and Sofer (2010), in this section I turn my attention to the second paper which acted as a stimulus for this research. Here, I reflect on Hawkey and Prior (2011) to consider their findings within the context of my own.

Perhaps Hawkey and Prior's two most significant findings, certainly within the context of my research, are that the informal, family views of history have a greater impact on ethnic minority perceptions than those that they get from school and that ethnic minority students see the national historical narrative as a story of exclusion and White privilege. These findings are particularly interesting given that they contrast so clearly with my own. Where in Hawkey and Prior's research informal experiences seemed more important so in this research it is formal experiences. Similarly, they highlight a narrative that is clearly drawn on ethnic lines while here, intersectionality of student identity is foremost and ethnicity is a starting point.

Perhaps these differences are less surprising given the methods and context of Hawkey and Prior's research compared to my own. While Hawkey and Prior do, at least superficially, appear to use similar methods – they engage in image creation, interviews and observations – the way in which these are carried out is different. Whereas in my research the students are the focus and knowledge of the curriculum is incidental and through my own knowledge of the curriculum as a teacher and Head

of Department; in Hawkey and Prior the platform is shared between the students and their school's respective Subject Team Leaders, both of whom are interviewed in depth. Having these dual perspectives entrenched in the data does allow for triangulation in its traditional sense. However, it also has the potential to encourage Hawkey and Prior down a particular route of thinking, particularly given that they were using pre-determined hypotheses as a starting point (Epstein, 2007).

In addition to the differences in method, the context could also explain the contrasting findings. While history and geography are often paired together – as Humanities subjects, as EBacc subjects and as subjects which are often in direct competition – they have very different histories and narratives. In the same way that I trace the nature and place of geographical knowledge within the curriculum in Chapter 2 so a similar chapter could be written on historical knowledge. In brief terms, this would highlight the focus of both the 1988 and 2014 versions of the National Curriculum on chronology and British history, a telling of our island story (Baker, 2011). It would also explain that the 2007 National Curriculum of the New Labour government emphasised two events, the slave trade and Holocaust, which were to be taught with an eye to contemporary concerns regarding genocide and racial discrimination. It was a controversial inclusion which the Historical Association responded to by issuing a report 'claiming that some teachers avoided dealing with such tricky issues in the classroom for fear of causing offence in local communities or, conversely, because in an 'all White' school there was thought to be no need for discussion of them' (Sheldon, 2011:35).

Comparing this curriculum context, which was dominant in history when Hawkey and Prior were carrying out their research, with the geography curriculum experienced by the students in my research further suggests why the findings are so contradictory. The geography curriculum appears more outward looking, more global, than the history curriculum which looks inward towards the UK. It is unsurprising then, that the ethnic minority students in Hawkey and Prior's study struggled to see their place in the formal curriculum and consequently looked for alternative narratives from their informal experiences. They saw the national historical narrative as one of exclusion and White privilege. Perhaps the different outlook in geography allows students to feel more included. There is a place and space for them to study topics that accord



with their ethnic identities, for example flooding in Bangladesh. It would be disingenuous however, to cast geography as wholly inclusive as there were times, specifically when discussing fieldwork, where the students, as high-ability women, appeared to be excluded.

In addition to considering the formal curriculum context it is also important to consider the locational one. While Hawkey and Prior were working in the UK, as I am, their research was carried out in the cities of Bristol and Birmingham rather than in the predominantly rural county where my research is based. These urban areas typically not only have much higher proportions of ethnic minority students (16% and 47% respectively) but also different ethnic minority groups tend to be concentrated within different parts of the city. The result is that schools located within these areas can be relatively ethnically homogenous and composed of ethnic minority majorities. This contrasts with the situation at Clayton's where, at a county scale, the proportion of ethnic minority students is close to the national average (13.6%) but they are geographically dispersed (Office for National Statistics, 2013). Schools such as Claytons have a sizeable and growing ethnic minority population yet, they remain a minority compared to the White British majority. This context perhaps makes the contrast between a nationalistic history curriculum studied by an ethnic minority majority population more stark.

Hawkey and Prior do acknowledge that students have hybrid identities, specifically identifying that their teenager identities appear more dominant than their ethnic identities. While this accords to an extent with my findings, the lens of intersectionality means that I see the different facets of the students' identities as being additional rather than in isolation. For example, where Hawkey and Prior see students who are Indian and teenagers, I see students who are Indian teenagers a subtle but important difference.

## 11.9 A critique of perspective influence theory, Martin (2005, 2006 and 2008) and Kitchen (2013)

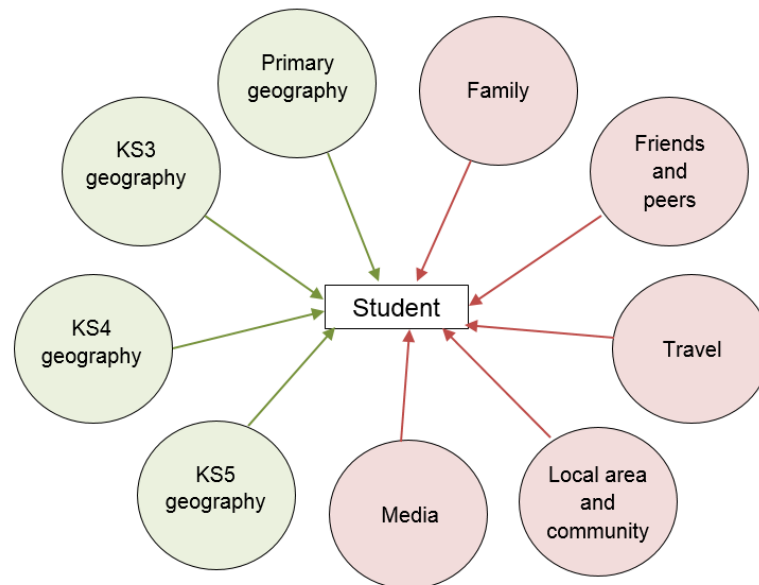
Perspective influence theory, at least in its diagrammatic form (Figure 2.2), came about from my Masters research and my attempt to explain the different influences acting on students' views of geography. As there were clear overlaps between this and the research question discussed within this chapter I felt it was a useful theory with which to engage. As I explain in Chapter 8, it suggested questions to be asked during the semi-structured interview and provided a deductive framework for analysis.

My findings detailed in this chapter, which also use perspective influence theory as a structure, show that the students' stories reflect the messiness of the real world and that formal experiences seem to be more important than those that are informal in students' representations. I also suggest in Section 11.6 that formal experiences are more clearly articulated and appear more dominant because they are more tangible and there is a formal, shared framework on which they can be hung. Perspective influence theory also added a layer of structure to my interview questions. By using it as a driver it has perhaps encouraged students to answer in ways that favour formality. In other words, it is easier for students to talk about their stories in terms of their formal experiences of geography which may suggest why these are dominant; a result of how the students tell their stories coupled with the limiting nature of applying the theory in the way that I have done. If I had instead put this theory to one side and reduced the level of structure in my interview I suspect that informal experiences might have come to the fore a little more.

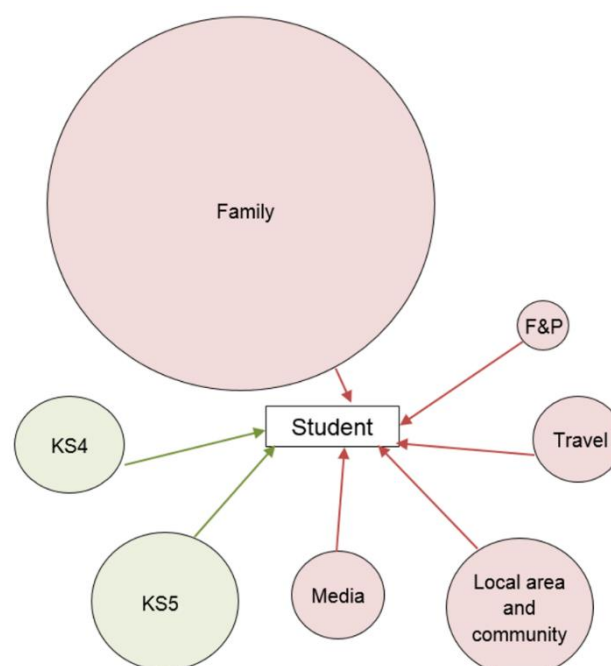
In the same way that I refined perspective categorisation theory in light of my findings I have also developed perspective influence theory. I have simplified the general theory and used Philippa's collage and interview to make different influences larger or smaller depending upon their perceived importance (Figure 11.9 i, ii and iii). Stripping out some of the complexity of the original theory may initially appear counterproductive. However, it allows the application of the theory to the students' stories which would have been difficult otherwise. It would have been interesting to develop a model that combined representation categorisation theory with perspective

influence theory. However, as I explain in Section 11.2, students struggled to link particular actors or experiences directly to their representations and so any attempt to link the two theories would not be true to the data. For this reason I have also made the decision not to change the name of the theory to one that reflects an influence on representations.

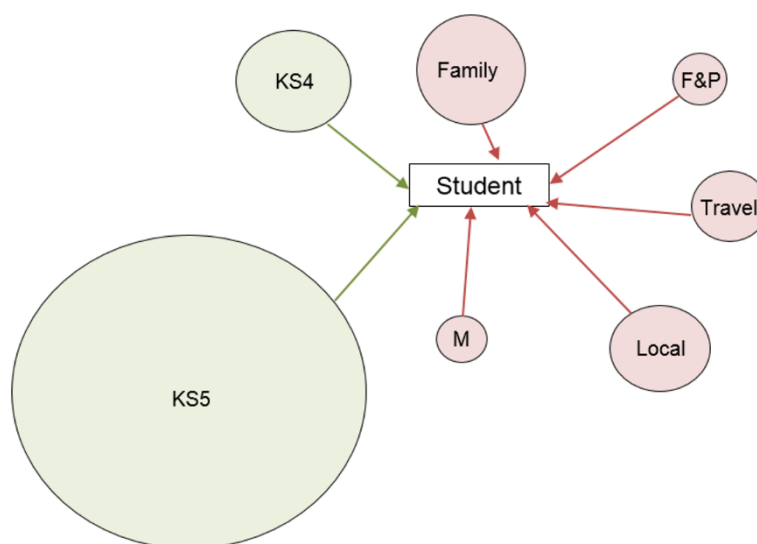
i. General model



ii. The influences on Philippa's view of geographical knowledge from her interview



- iii. The influences on Philippa's view of geographical knowledge from her collage



*Figure 11.9 Developing perspective influence theory*

In the model of perspective influence theory, formal influences are coloured green while informal influences are coloured red. I have chosen to keep the formal categories general. I do not distinguish between the influence of the teacher, content or activities but rather identify between different stages of geography. This is partly to ensure the model remains simple and easy to use but also because it was not always easy to distinguish these different aspects clearly from the data. The formal categories are also deliberately broad. I do not distinguish between family which is wider or immediate for example, and use 'media' to mean a variety of things from books and newspapers to television and the internet. This is particularly interesting in Philippa's context as she was not permitted to access many examples of media but read prolifically. The models which reflect her interview and collage (Figures 11.9.ii and 11.9.iii) highlight how different influences appear to shape the representations which are created using different methods.

## 11.10 Conclusion

To summarise, the key findings from this chapter regarding how students' stories relate to their representations are that:

- the way in which the students tell their stories reflects the messiness of their lives.
- recent formal experiences of geography appear to be critical and fieldwork is an important element of this.
- in primary school physical geography was tackled in a thematic way while human geography appeared to be covered in a placeist way.
- the students appear to have different frameworks for structuring their view of geographical knowledge which are dependent upon the stage at which they gave up their formal studies.
- students' informal experiences are not always explicit or straightforwardly definable and it is perhaps for this reason that formal experiences seem to dominate.

In the same way that answering my first research question was initially problematic (Chapter 10) so this research question also requires scrutiny. Built into this is a constructivist assumption that students' stories link to their representations, that through their interviews and critical incident charts they would begin to explain the features that appeared in their collages. However, as explained in the introduction to this chapter, this proved challenging both because the students' stories were complex and messy and also because they rarely linked directly back to the collage they had created.

Again, it is consequently worth considering whether this was a suitable research question to pose at the outset. This question was initially conceived to act as a bridge

between students' representations of geography and their decisions that they had made post-14. I was keen to steer clear of language which implied any ability to generalise about cause and effect but still wanted to make a connection between the two, if possible, for individual cases. As the fundamental components of the initial issue in my practice, representations and subject choice both needed to be included, but unless I could form a bridge between them my study would lack coherence. Therefore, at a purely pragmatic level, this research question was essential to explicitly join the two parts of my thesis together.

This question also ensured that I focused on providing deep and rich accounts of the students. It was always my intention to tell their stories and yet, if this research question had been omitted there is a risk that I would not have managed this effectively. It acted as a prompt, compelling me to do what I initially set out to do. Arguably, it cannot be straightforwardly answered but that is not really the point. It has served the purpose of sharpening my thinking around representations of geographical knowledge and student choices post-14 and identified the difficulties of linking the two.

## Chapter 12

### How do the students account for the GCSE and A level option choices that they made?

#### 12.1 Introduction

Having focused very much on the subject of geography in the previous two chapters, this chapter broadens out and details how students account for the decisions they make about subjects they choose to take post-14 at GCSE and A level. In the same way that linking students' stories with their representations was problematic in Chapter 11 (see Section 11.2), identifying whether and how these choices sit with their views is equally challenging. Hopwood (2012) is keen to point out that while it is likely that student views of geography affect the decisions students make, the options process is complex. Any links I make between representation and decision are therefore tentative unless explicitly described by the student.

As Weeden (2007) explains in Figure 5.1 there is a range of external, whole school and departmental factors and variables which affect and constrain student choice. At a whole school level these are often employed to enable efficient timetabling, to ensure that all students study a broad and balanced curriculum and, in some cases, to encourage able students to take Ebacc<sup>114</sup> subjects. They also vary considerably from school to school and therefore it is worth pausing for a moment to consider some of the whole school variables which affect student subject choice at Claytons.

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<sup>114</sup> The introduction of the EBacc is discussed in Chapter 5. However, it is worth noting that in 2015, 23.9% of students in state funded schools achieved the EBacc. In the same year 82% of students at Claytons achieved this measure (The Telegraph, 2016).

At Claytons, GCSE options are chosen in the February of Year 9 before the two-year course<sup>115</sup> is embarked upon in the following September. Therefore, the Year 12 students in this study chose their GCSE subjects in 2012 and the Year 13 students in 2011. The main external political change which may have affected GCSE option choice at this time was the introduction of the Ebacc (Chapter 5). However, this has had apparently little impact at Claytons as students have traditionally had to choose at least one language (French, German or Spanish), one humanity (geography, history, Religious Studies, Business Studies) and one creative (art, drama, PE, dance, textiles, food technology, music) subject in addition to English (literature and language), maths and three sciences (biology, chemistry and physics). It is also worth noting in the case of Claytons, that in addition to these GCSE choices, students are also given the option to study various AS level qualifications including General Studies and World Development in Year 10 and 11. While data was not collected on the initial questionnaires regarding these choices, several students mentioned the study of these additional courses in their interviews.

The choice of AS and A level courses at Claytons is less restrictive and students are given a free choice of 35 different subjects (a full list can be found on the questionnaire – Appendix 7.iii). Both existing and prospective Claytons students must achieve a minimum of 362 points<sup>116</sup> at GCSE to be admitted into the sixth form. Having met these criteria they then select four or five subjects to study at AS level in Year 12 which then reduce to three or four subjects which are studied at A level in Year 13. The main constraint on this choice is that students must achieve at least a grade B at GCSE to be able to study that subject in the sixth form. All students are also invited to interview during Year 11 with a member of the Senior Leadership Team to discuss the subjects they have provisionally chosen.

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<sup>115</sup> GCSE courses were originally designed to be taken over the two years of Key Stage 4 (Years 10 and 11) and this is the model that Claytons have adopted. However, many schools have moved to alternative curriculum models with some following a three year GCSE course (students choose their subjects in Year 8 and study them throughout Year 9, 10 and 11) and, increasingly, some intensively teaching GCSE courses within one year (subjects are allocated double time and students study the subject in either Year 10 or Year 11).

<sup>116</sup> These points are calculated from the best 8 GCSEs (or equivalent) including at least grade C in English and maths where A\* = 58 points, A = 52 points, B = 46 points, C = 40 points, D = 34 points, E = 28 points, F = 22 points, G = 16 points. For example, 5 Bs and 3 Cs would score 350 points (the student does not meet the 362 entry criteria and so is not admitted) while 4 As, 3 Bs, 1 C would score 386 points (the student does meet the 362 entry criteria and so would be admitted). Where students have not taken 8 GCSEs, the school considers cases on an individual basis.



It is worth reiterating at this juncture that the students at Claytons are high-ability – the average GCSE grade in 2016 was an A – and so the options process focuses on enabling students in their choices rather than limiting them. The message from the Senior Leadership Team to both students and staff is that, providing students' choices fit within either the option structure (GCSE) or academic requirements (A level), they will be able to study the courses that they have chosen. The general guidance given by the school to students is also worth noting as it is likely to shape student choices at some level (Figure 12.1 and 12.2).

<div style="border: 1px solid black; padding: 5px; text-align: center; margin-bottom: 10px;"><b>HOW SHOULD I CHOOSE?</b></div> <ul style="list-style-type: none"> <li>✓ Which subjects will I enjoy?</li> <li>✓ Ideas for careers?</li> <li>✓ Possible A Level choices?</li> </ul>	<div style="border: 1px solid black; padding: 5px; text-align: center; margin-bottom: 10px;"><b>HOW SHOULD I NOT CHOOSE?</b></div> <ul style="list-style-type: none"> <li>× The same as your friends</li> <li>× Because you like/dislike your teacher</li> <li>× Because a subject is new – they all are</li> <li>× Because your parents did or didn't do a subject in the last century</li> <li>× Because your teachers beg you!</li> </ul>
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*Figure 12.1 Slides from Clayton's KS4 option evening presentation to Year 9*

**SO WHICH SUBJECTS TO STUDY?**

- **Content, Style, Value**
- 'Hard' & 'Soft' subjects
- AS & Extension subjects
  - ❖ Contrast or complement?
  - ❖ Look at overall workload
- Facilitating subjects

*Figure 12.2 A slide from Clayton's KS5 option evening presentation to Year 11*

This chapter takes the individual attributes and structural factors identified in Chapter 5 and uses these as a theoretical framework (Adey and Biddulph, 2001; Ferretti, 2007). Sections 12.2 and 12.3 address the individual attributes of enjoyment and perceived usefulness respectively, while Section 12.4 discusses perceived ability. However, Section 12.5 deviates slightly from the literature framework and discusses effort and risk, factors which emerged from Sabah's interview in particular. Throughout these sections I have attempted to foreground geography although within the context of a complex decision making process where a student's suite of decisions is sometimes more important than their individual ones. Section 12.6 then explores the role of structural factors specifically teacher and parental influence. This study is unique among those in the recent literature as it affords a perspective on the factors affecting two post-14 choices where most focus on one in depth. Therefore, Section 12.7 takes the opportunity to explore the different factors which appear important at GCSE and A level and how they differ. As in the previous two chapters I have chosen to focus on telling the story of one of the students in detail and Section 12.7 focuses on Rosie. Hers is a story which articulates the decision making process in the most detail and which shines a light on the influence of different actors – her parents, her music teacher, her friends – and different cultures – Chinese and English – on her decision making.

While the majority of this chapter focuses on how the eight students in my strand of research account for their option choices at GCSE and A level, Section 12.8 reports on the findings of the group of students as researchers (Chapter 9). The five student researchers produced two research reports which explored GCSE option choice among their Year 10 peers; 'What are the factors contributing to students choosing geography at GCSE?' and 'What influence do parents have on the choosing of GCSE options?'. Methodologically and ontologically these sit well with the literatures described in Section 5.3 of Chapter 5 and provide a different and innovative perspective.

Determining how best to present the findings of the SaRs within the context of this thesis was challenging. It led to my presentation of a conference paper – 'students as researchers: the ethical dilemmas of climbing up the ladder of participation' (see Appendix 12.i) – which asked delegates to consider how I could weave the students'

findings and analysis with my own to create a coherent narrative. However, instead of providing answers, the presentation clarified and shifted my thinking making me realise that I was focusing on the wrong aspect. Instead of trying to shoehorn the students' findings into my own framework surely it was better to allow their findings to stand separately and to speak for themselves? I also became conscious that it might prove difficult for readers of this thesis to mentally switch between the different studies, particularly as students from different year groups were the focus. Therefore, I have decided to present the findings and analysis from the students as researchers reports separately at the end of this chapter as, ironically, I feel that this will provide a more coherent account than one that is woven around and within my own.

## 12.2 Individual attributes: enjoyment and interest

Enjoyment of a subject is identified in the literature as one of the most important attributes for students considering their option choices at GCSE level and is a factor clearly highlighted by the school (Figure 12.1). All of the students in this research said that they enjoyed geography at KS3 (whether that was because they genuinely did enjoy the subject or because they were being interviewed by the Head of Geography was unclear). However, while they felt that enjoyment was an important factor in their choice of GCSE, it appeared to be less important than other individual attributes such as ability and usefulness for most of them.

*'Some of it was enjoyment, like what subjects do I enjoy the most. Again, we had to pick between French and German and they were both equal in my mind to be honest, but I enjoyed French more so I picked it based on that. But I think that's the first time in your life that you have to make a decision looking into the future. Maybe if I'd picked it based on just enjoyment rather than which ones I'm doing best in and which ones are going to be the most useful I don't know that I would have picked the same ones.'*

Olivia

The main exception to this was Tabitha who felt that the way in which the school had structured the option blocks allowed her to select the subjects that she enjoyed while still maintaining a broad and balanced curriculum.

*'Yeah, I think it was more going through what I enjoyed, because they do structure it quite clearly so that you have a good range of subjects anyway.'*

Tabitha

The relative importance of whether a subject was enjoyable or not may have been a function of how clearly the student saw their future career. Olivia was clear that she wanted to follow a career in law and was aware of the subjects that would support and enable this pathway. Enjoyment was therefore less important for her as she knew the subjects that would be useful and which would allow her to succeed because she had ability in them. Tabitha was one of the only students who was unclear about her career trajectory. She had been inspired by wildlife documentaries as a young child and was focused upon studying zoology at university, however she did not know the career which would follow from this. This may explain why, at GCSE especially, enjoyment for her was paramount.

There appeared to be a clear shift between GCSE and A level where the enjoyment of a subject appeared to decline in importance as a factor. Most students seemed to enjoy the subjects that they had chosen for GCSE and, if there were any that they found from experience that they did not enjoy, then they were unlikely to carry these on to further study. The reduction in enjoyment as a factor at A level is likely to be due to a combination of reasons which students mentioned in their interviews. Students felt that the decisions they made at A level carried more weight than those they had made at GCSE. They were more aware of the fact that their A level results would lead to particular outcomes and the feeling of shutting off or opening up opportunities dependent upon choices was evident.

*'We went and looked around [a university] and I was like, well I'm not going to do music...and then I was like, well, I probably won't go to a conservatoire because I don't want to just play piano for several hours a day. I like it as a hobby but I don't think I'd be able to do it as a degree. Then I went, 'well why am I doing A level music then?' because although I enjoy it I thought I should be just doing further maths instead, because I'm a lot better at maths. So to get an A in maths I wouldn't have to work as hard as to get an A in music. And I thought, well, my aim is to get into a science course at university, that's my overall aim, so if I'm not particularly good at music and I'm better at maths, why aren't I doing that? And I think it was the university visit that was kind of a wakeup call, like I'm going to be applying to go to university in a years' time, I need to make sure that I don't make any mistakes now.'*

Rosie

Marie, Naomi, Qabilah, Rosie and Tabitha all discussed the role of the teacher in making a subject enjoyable. They were agreed that 'good' teachers increased their enjoyment and identified enthusiasm as central.

*'Yeah, I think generally I've always enjoyed geography since Year 7. I guess a lot of that comes down to having good teachers and like enthusiastic teachers as well.'*

Tabitha

In addition to enthusiasm, Qabilah mentions pedagogy here although she is the only student to really articulate what this means in the context of geography. She explained that being given a GCSE specification to explicitly link her learning to was helpful and that a mixture of activities had engaged her.

*'I'm a learner who has different learning techniques. Like, I like listening to things but then I like doing visual things, but then I also like kind of reading stuff and doing independent work as well...and because we had case studies, some of them we did alone, some of them we did in pairs or groups. You just mixed it up a bit.'*

Qabilah

While Qabilah and Tabitha talked generally about the features of a good teacher, Naomi was more specific about how the role of the teacher changed depending upon the school stage. She felt that during KS3 it was important for teachers to make learning enjoyable while student / teacher relationships were of increasing importance in KS4 and KS5.

*'Year 7 it's who makes the lesson fun, who doesn't set masses of homework and isn't terrifying. Year 9 it begins to progress...you develop a rapport with the teacher and then A level, it's quite annoying when they don't teach you as if you have some level of competence.'*

Naomi

The importance of these relationships post-14 was also highlighted by Rosie and Marie but in the context of teachers that they did not get on with. Rosie explained that she hated biology because she felt one of the teachers was patronising. Marie explained that it was her relationship with her teacher, coupled with her perceived lack of ability, which affected her enjoyment of Spanish at GCSE.

*'I didn't really get on with my Spanish teacher. At all. I mean it didn't really help that she was head of the Key Stage or whatever and I was a nightmare. So that didn't really help matters [laughs]! It was more the fact that the writing and the speaking assessment, the coursework ones, I was awful at them.'*

Marie

Marie's comments highlight the difficulty of extricating enjoyment from ability, a feature which is also discussed in the literature (see Section 5.3). They also articulate how relationships with teachers outside of formal lessons may influence how students feel about subjects.

While the teacher can have an influence on whether or not students enjoy a subject, Sabah and Olivia both explicitly said that the teacher was not as important as the content itself.

*'I felt pretty much the same about the topics no matter what the teacher was doing.'*

Sabah

*'I truly believe that teachers have a big influence, but it was the content more than anything.'*

Olivia

Olivia was particularly clear that her enjoyment of history was mainly a result of the topics that they were studying at A level which she described as being relevant and within her sphere of interest. While she was not explicit as to whether relevance was in relation to her interest or something else such as a potential career, it seems that how students view content in these terms is important.

What was particularly interesting was a general acceptance from most of the students that some subjects and parts of subjects were, by their nature and content, intrinsically more enjoyable than others. For example, when discussing geography all of the students felt that the human side was more enjoyable than the physical side; they found it more relevant and less abstract.

*'What I think basically I'm saying is no physical geography, just human geography!'*

Sabah

*'You meet people on a daily basis, if you go somewhere the people are what strikes you the most. Whereas...I hadn't experienced any volcanoes and things. It's like the whole reading something in a book and you can't really connect with it. So, it was all well and good learning about these volcanoes and things but it didn't really apply to me. I felt I was learning it for the sake of being tested.'*

Olivia

This appears to reflect the preference among girls for studying human geography over the physical environment which has been noted in several studies focused on school

geography, science and geoscience (Johnson, 1987; Qualter, 1993; Trend, 2005; Hopwood, 2012)

In addition to the influence of the teacher and the nature of the subject itself, Naomi was able to highlight a more personal factor which had influenced her enjoyment. She described how her love of one subject had developed throughout the GCSE course as it became a coping mechanism for stress.

*'I was going to do textiles and music and then I realised textiles is a massive passion of mine. I sew. I mean, I'm not wearing anything I've made today which is quite a rare occasion because I make and sew most of my clothes. It was a coping strategy for last year. I mean, I loved GCSE textiles, absolutely loved it. I made a fairy costume, wings...it was always something that had come naturally to me but music was a more prestigious thing to do. I'm surrounded by quite a lot of musical people at home and in life so there was always a push to do music, but I'm so glad I did textiles.'*

Naomi

Here, Naomi is clear that while structural factors such as parental influence were pushing her in the direction of music, it was her enjoyment of textiles which ultimately influenced her decision. As an able and academic student she articulated that she felt quite pressured into doing a subject which was deemed more prestigious by her parents, but it was textiles, the subject she enjoyed, that actually gave her a coping strategy to deal with this pressure. She enjoyed the subject at GCSE level so much that she decided that she wanted to take it for A level, however the course did not run.

*'I had chosen Textiles. And he [the Headteacher] wouldn't run textiles 'cos it's not a facilitating subject. I beg your pardon, if you want to go to university to study fashion design, you kind of need textiles.'*

Naomi

Regardless of the reason for the course not running, Naomi explained that during Year 12 she had become ill with stress and while she did not directly attribute this to not studying textiles, not having her coping mechanism may have played a part.



Taking these points together, the first finding of this chapter is that if students are engaged and enjoy lessons because of how it is taught then, post-14 they may choose to take the subject; this is more likely if they also find the content relevant. At A level, where enjoyment becomes less important, student views of geographical knowledge become more so. The teacher can do everything to make their lessons enjoyable, but if the student does not relate to the content knowledge and see its usefulness then they are unlikely to choose to take the subject further.

### 12.3 Individual attributes: perceived usefulness

Throughout the interviews students identified subject usefulness in two ways; generally in terms of potential careers and, with reference to geography, in terms of applicability to their lives.

All but two of the students had a fairly clear idea of the type of career that wanted to eventually go into. Sabah, Naomi and Philippa all had aspirations of careers in medicine; Olivia and Qabilah wanted to study law, although Qabilah equally thought that she might go into politics and Rosie thought she would probably go into engineering. As identified in Section 12.2 Tabitha was keen to study zoology at university although she was unclear quite where this would head. The only other student who did not really know what career path she would follow was Marie. She articulated a disconnect between what she really wanted to do and what she was expected to want to do.

*'I mean there was a brief time when I was like "Oh, I'll go to a conservatoire". I'll go to play music or I'll go to do composition or whatever and no, it's not seen as... I think that if I was less academic then everyone would be saying "Oh, you should do that, that's what you should do". But because I'm predicted the high grades it's seen as a waste. And I will go and do something academic and will go and get a high paying job.'*

Marie

These potential careers identified by the students are professional, competitive and require high grades at both GCSE and A level to enter them. It is likely that the reasons for choosing these paths had more to do with the culture of the school, the students' ability and their socio-economic backgrounds than their ethnicity. The nature of the career choice was similar across ethnicities suggesting that stereotypes of ethnic minority students being encouraged to study law and medicine do not necessarily hold within this study. Indeed, Sabah was keen to point out that her doctor father had actively dissuaded her from pursuing a career in medicine but that she had ignored him as it was what she was interested in.

*'I: And you say your dad is a doctor. Has he ever encouraged you or discouraged you in that sort of path or not really?'*

*S: He has, he's discouraged me quite a lot! I went on work experience with him for two days and basically every person I met said "don't be a doctor, it's too much hard work".'*

Sabah

Students were clear that often their choices at both GCSE and A level were made with their potential career in mind. For example, Olivia had taken history at GCSE level, despite preferring and being better at geography during KS3, because she had a clear idea that she wanted to go into law. The Head of Sixth Form had suggested that history would be a better choice and would give her the skills needed for law and this had influenced her decision. Similarly, Sabah decided to choose Religious Studies at A level because medical ethics was covered in the course and she felt this would be useful in her potential career as a doctor and it was an aspect that she enjoyed.

Those students who had chosen to study geography to A level were more able to articulate the subject's intrinsic usefulness. However, most students did not see geography as being useful to their chosen careers but instead were generally much more able to relate the subject's usefulness to their everyday lives. They highlighted being able to read a map, knowing where places are and being aware of current affairs as being particular areas which were important.

*'Like you're on UCAS and you're looking up different places in the UK and you're like I've got no idea where Bradford, or Leicester or Newcastle are. I know they're up north somewhere but I've not idea where they are in the UK...I think more UK geography would be quite useful, like in the first couple of lessons in Year 7.'*

Naomi

While most students could identify the usefulness of geographical knowledge to this extent, Sabah was much more dismissive.

*'It [geographical knowledge] will be useful in a general knowledge quiz but other than that I don't see how it will affect me in the future.'*

Sabah

The geographical knowledge identified by students here as being useful or not useful is a mixture of core knowledge and applied practical skills (see Section 2.9) neither of which necessarily requires deep understanding or synoptic thinking.

This is the second finding of this chapter and highlights a fundamental problem with how students view geographical knowledge; unless they can see the intrinsic usefulness of the subject they are unlikely to choose to study it. This is a particular issue at A level where usefulness appears to become more important than other individual attributes such as enjoyment. Coupled with this, students need to be able to see how formal geography lessons take them beyond their everyday knowledge. It was Marie who was able to tie these two ideas together.

*'I think I'll always have an interest in current events but I don't really think I'm going to learn more about coastal erosion or glaciers...Whereas current events will always be interesting for me and that's like the human geography and that's because I think that you can talk about it with less knowledge. If you were going to have a discussion about physical geography you have to know your facts ...and you have to know why it works. Whereas anyone can give an opinion on something to do with people, like the movement of people, because that is more common sense. That's what you get from experiences in life, not necessarily what you learn.'*

Marie

## 12.4 Individual attributes: perceived ability

As has already been discussed, both in Section 12.2 and in the literature in Chapter 5, students generally felt that often their enjoyment of a subject went hand in hand with their perceived ability in it; if they felt they were good at it, they enjoyed it and vice versa. This was particularly the case at GCSE level where Qabilah in particular talked about students who had not selected geography saying that they found it difficult and therefore did not enjoy it. Students were more likely to choose subjects that they felt they were better at and were potentially able to achieve higher grades. This seemed to be particularly the case for those students who did not really know what they either wanted to do at university or as a career.

*'To be fair for me I didn't really think about it [what I was going to do at university]...I didn't think that far ahead I just picked stuff that I knew I'd get a good grade in.'*

Marie

However, if students were in the position where they had several subjects that they were doing well in, they then tended to choose the one which they enjoyed the most. As Sabah explained:

*'Well pretty much what I did is I looked at all the levels I was getting in each subject...I was getting about the same scores in RS and geography, I was getting level 8s in both so I thought I should pick one between them. So, I just went for RS because I like the ethics side.'*

Sabah

Three students who felt they were good at geography (and who all subsequently went on to study the subject at AS and A level) highlighted that it was their ability to make synoptic links both within and between subjects which led them to believe they had ability in the subject. They felt that because this came naturally to them, they found it fairly easy to do well in geography and therefore they enjoyed it more. It motivated them to want to study the subject further.

*'I think generally I've always enjoyed geography since Year 7. I guess a lot of that comes down to having good teachers...but I like writing when we're set tasks and things because we were always taught, be synoptic, get in all the links and things, which comes quite naturally. So, it's really satisfying to link it all together, which is why I think I enjoy it so much.'*

Tabitha

This deep and synoptic thinking which is explained in the context of the literature in Section 2.9 not only requires geographical knowledge of all types but also requires the practical application of them. It appears that both Tabitha and Qabilah find this relatively straightforward to do, leading them and makes links between the knowledge they possess; in short it enables them to develop their geographical understanding.

While I would have expected ability to have been an important factor when students were choosing their A level courses none of them mentioned it explicitly. This could be because ability did not feature in their decision making at this level, however, this is highly unlikely given the high stakes of A level exams. Rather, it is more likely that students took their ability in a subject at this point as 'given'. In most cases this had already been externally verified at GCSE level and in addition, both they and I were aware that school structures prevented those with less than a B grade from studying a subject at A level. They did not mention their ability because it was obvious. This

could possibly be a feature of the context – students in a grammar school are, by definition and design, of high-ability – or of methodology – the students were not directly asked about their ability and its effect on their decision making. However, given the findings by Ferretti (2007) where getting a good GCSE grade was the most important factor in student choices at A level this is an interesting finding.

While ability was an important factor, a couple of students mentioned that they did not always want things to be too easy; they liked a challenge and so had picked at least one subject which they knew would provide this for them.

*'I think a challenge is nice because it allows you to kind of think things through more. Not just be like knowing everything...if it's hard you want to work at it. It kind of motivates you to work at it.'*

Qabilah

*'AS [Chinese] was OK, I didn't have to put that much work into it but A2 you have to write a 500 to 1000 character essay which is going to be a challenge for me. I kind of want to do it just because it's a bit of a challenge but at the same time I really shouldn't jeopardise my other subjects.'*

Rosie

Here students seemed to be selecting subjects not only on their individual merits but as a suite of options. They wanted a balance between their chosen subjects so that they remained motivated.

A third finding then is that ability was an implicit factor in students' decision making and it is therefore difficult to assess its importance. Ability was also difficult to extricate from enjoyment and those students who highlighted their ability in geography focused on the fact that making links between concepts came naturally to them.

## 12.5 Individual attributes: effort and risk

While the previous sections have identified those individual attributes – enjoyment, perceived usefulness and perceived ability – which were features of all of the students' discourses and discussed in detail in Chapter 5, there were two additional factors – effort and risk – which were identified here but which do not appear significantly in the literature. As highlighted in the previous section, students explained that they liked to have a balance between choices that provided a challenge and those that were too challenging. For example, Rosie explained that she found German too difficult. While she acknowledged that she probably had the potential to do well, the amount of effort she would need to put in would be disproportionate and she therefore did not choose the subject at GCSE.

There were some subjects that were perceived to involve a large volume of work and the trade-off between the effort which would need to be invested and potential outcomes were a serious consideration. GCSE textiles in particular was seen as being very time consuming.

*'I'd picked to do textiles at that point and like, textiles is a bit stupid isn't it? Because you have masses of coursework...You have like 20 A3 pages and in size 8 font or something.'*

Rosie

Interestingly, geography was mentioned by Olivia as being one of the subjects that was perceived to involve a large volume of work. These perceptions were formed from conversations which students had had with other students either informally, talking to siblings or friends on the bus, or formally at open events.

*'I remember coming on an open day and I remember people saying how much work geography is and it's really intense. I've definitely seen that from my friends that have taken it.'*

Olivia

One student, Sabah, seemed particularly risk averse. At both GCSE and A level she discounted subjects that she had not previously studied.

*‘And then I thought Business Studies, I don't know how that one's going to be so let's not do that, I don't want to take a risk.’*

Sabah

These comments highlight the complexity of students' decision making and the importance of seeing choices both holistically and individually. The balance between challenge and effort is a difficult one to determine prior to the commencement of a course, but one that seemed relatively important to students. It also hints at the fact that some students, who are more risk averse, may choose subjects that they are familiar with rather than those that they perceive to be new and therefore risky. This favours those subjects that are part of the KS3 curriculum and which students consequently have some experience of.

## 12.6 Structural factors: teachers and parents

As I highlight in Chapter 2, the positioning of knowledge, the curriculum and education are never neutral, they are set within wider society, and so, before I consider the role of teachers and parents within the options process it is worth pausing to consider how students viewed the over-arching social structure in which their post-14 decisions were being made.

Perhaps surprisingly, several students seemed particularly cognisant of the role that society and education played in the shaping of their views. Naomi was particularly clear that her views of subjects had been shaped by going to a single-sex grammar school, something that she was not happy about.



*'I don't know, 'cos I find it [geography] fascinating and that's what really annoys me, because my view of the world is shaped by going to an all-girls' grammar school. That annoys me massively. It's [geography] not your nuclear engineering if that makes sense, but it's still valid, it's still an academic subject. It's not your cream of the crop. I mean we're always told we're the cream of the crop and expected to go for the cream of the crop subjects, your maths, your sciences, it gets all the funding.'*

Naomi

While she is not clear about who has told her to go for the 'cream of the crop' science based subjects, the expectation is there and something that she attributes to her educational context.

Indeed, nearly all of the students appeared to have a clear view of a subject hierarchy; where individual subjects were seen as being more or less academic and therefore more or less worthwhile. This was a feature of seven of the eight students' interviews - interestingly, the only student not to make a comment regarding the social status of subjects was Philippa who had previously been home educated - and particularly came to the fore when they were discussing their choice of a creative subject at GCSE<sup>117</sup>. Many of the students did not see these subjects as valuable and explained that they would much rather have chosen subjects that they felt were more useful and academic.

*'I remember finding it so frustrating at the time and I do find it frustrating having to do a creative because there were so many others that I would have liked to do.'*

Olivia

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<sup>117</sup> In order to maintain breadth and balance, every student has to choose a creative subject to study from a block which includes art, drama, PE, dance, textiles, food technology and music.












*'S: I think everything is seen as an academic subject except one or two.*

*I: What are those one or two?*

*S: Pretty much all of the creative subjects, like art, food tech, textiles. By academic I mean like you'd have to do a lot of work for the exam. Whereas for most of the creative subjects people didn't revise at GCSE, they still did OK. They weren't as worried about it.'*

Sabah

This perceived hierarchy appeared to have a significant impact on the students' decision making, albeit implicitly, and seemed to be reinforced by both their parents and the school. The status of the school as a highly achieving, girls' grammar school seemed to play an important part in shaping which subjects were seen as more valuable than others. Figure 12.3 clearly shows the value the school put on facilitating subjects<sup>118</sup>, a list where creative subjects are conspicuous by their absence, at the AS options evening which takes place every November.

(eg)	Accountancy	Aeronautical Engineering	Anthropology	Archaeology
Aberystwyth University				
Anglia Ruskin University				
Aston University				
Bangor University				
University of Bath				
FACILITATING SUBJECTS TURN THE MOST LIGHTS ON				

*Figure 12.3: A slide from Clayton's Year 11 into 12 information evening presentation.*

<sup>118</sup> Eight facilitating subjects have been identified by the Russell Group of Universities as choosing them for A level opens up a wide range of options for university study. These subjects are: mathematics and further mathematics, English literature, physics, biology, chemistry, geography, history, languages (Classical and Modern).

Most students saw maths and the sciences as being at the top of the hierarchy with the creative subjects generally being at the bottom. Subjects such as English, geography and history were seen in the middle, despite being on the list of facilitating subjects.

This hierarchy appeared fairly consistent even when ethnicity and cultural background was taken into account.

*Definitely [there is a subject hierarchy] in China, yes...maths is first and then you get science and then, it's not academic but music is very important there...I read an article or something somewhere that said that Chairman Mao, his wife really liked classical music.'*

Rosie

This perception of some subjects being more valuable than others has certainly been fuelled by recent political debate (The Telegraph, 2014). Arguably, including some subjects in the Ebacc but not others is divisive in this regard, signalling that those included are seen to be more valuable and academic. However, it is likely that the grammar school selection process may also play a part. During the September of Year 6 students sit the 11+ exam to determine whether they will attend a grammar school or a secondary school. This exam tests certain measurable skills; verbal reasoning, which includes comprehension and spelling and non-verbal reasoning, which includes mathematical problems, patterns and sequences. The students that pass the 11+ and therefore who attend Claytons, are likely to have these skills, skills which are factual, logical and, arguably a foundation for STEM<sup>119</sup> subjects. The 11+ exam does not measure creativity or empathy, skills essential for studying humanities and creative subjects, and while some students are likely to have these skills they are

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<sup>119</sup> STEM stands for Science, Technology, Engineering and Mathematics although definitions vary by institution and many extend this basic list to include subjects such as computer science, astronomy and even educational research. Geography has been identified by the Higher Education Funding Council for England (HEFCE) as a part-STEM subject based on the fact that the discipline is intellectually challenging and requires understanding and application of scientific logic, principles, methods and laws that govern the natural environment; an ability to develop and test hypotheses and to integrate ideas; and analytical capabilities to collect/select, analyse, present and interpret primary and secondary datasets, especially spatial data, and to understand and visualise complex data. Geographers are routinely trained in field, bench-lab and computer lab work; some receive training on computer-based modelling (Royal Geographical Society, 2011). There has been a recent focus on initiatives which encourage women to take such subjects as in the UK only about 13% of STEM jobs are filled by women (Arnett, 2015).

not a pre-requisite. It is therefore unsurprising that students who have been successful in this system are more likely to choose and to value STEM subjects at the expense of creative and humanities subjects.

The role of teachers and parents in post-14 subject choices should therefore be seen within the context of this societal backdrop. However, it was not always easy to extricate the two. For example, there were clear messages given out by the Headteacher about how to make 'good' choices (Figure 12.1 and 12.2), although whether these were shared by all staff is unclear. Students were also very aware of the difference between 'hard' and 'soft' subjects and which subjects were and were not 'facilitating'. If students did not end up doing the subjects they had initially chosen this was put down to the balance in their choices rather than other explanatory factors such as small class size.

*'S: Whereas with subjects like English, people felt like OK, this is important, I'm going to try and work hard to get...a good grade.*

*I: So do you feel that subjects like English are more important?*

*S: Yes.*

*I: Because it's academic?*

*S: Not because they are academic because, for example the Russell Group's list of facilitating subjects are all academic subjects.*

*I: And do people take notice of that?*

*S: Yes. A lot of people didn't want to, wanted to do a certain subject but the school wouldn't let them because they already had too many soft subjects.'*

Sabah

As in Sabah's explanation above there were several references to 'the school' allowing or not allowing students to take particular subjects, although students did not expand on exactly who might be making these decisions. The one exception was Naomi who explained that she thought it was the Headteacher who was responsible for the pervading ethos.

*'And I'd say the attitude comes from Mr. \_\_\_\_\_ (Headteacher). I mean, he tried to make me take physics. I'm like "Sir, I want to do German"...I don't even like physics.'*

Naomi

This observation raises interesting questions about who or what drives the ethos and messages given in schools regarding option choices. Are the messages given to parents and students at options evenings (Figures 12.1 and 12.2) given because there is collective agreement that these lead to 'good' choices or rather because this is the message that the Headteacher or Senior Leadership Team want to give about the right sorts of subjects to choose?

In the same way, it was also sometimes difficult to extricate the role of the teacher from other aspects such as enjoyment. For example, Tabitha was clear that the teacher was instrumental in her enjoyment of some subjects, however, she also recognised that choosing a subject because of the teacher was not seen to be a good reason.

*'I had always wanted to do geography because...the teachers they'd always been quite positive and enthusiastic and I knew I enjoyed it, that I would probably be quite good at it. I think it does come down to teachers...you're always told not to choose your subjects because of the teachers but...my maths teacher wasn't the best. I think that really put me off. Because I think that if I'd had a different teacher I'd have been really torn [at A level].'*

Tabitha

The lack of teacher influence could also have been due to the messages from the Senior Leadership Team regarding advice surrounding the selection of GCSE options in particular. Every year in February (the time of year when Year 9 students picked their GCSE options) we were reminded in staff meetings that every student had the ability to take every subject. Pragmatically, this meant that if students asked whether they were 'good enough' to take a subject at GCSE level, the answer had to be 'yes'. The result was that many teachers, myself included, shied away from discussing

options at all lest their message be misinterpreted. Therefore, while teachers gave information about the courses at GCSE and A level they tended not to give advice.

Similarly, the role of the parent in the options process also appeared to be to provide information rather than advice. Students talked about how parents and grandparents had provided information about careers which had shaped some of their thinking about the options process. For example, Olivia explained the role of both her grandfather, in suggesting articles that she should read, and her father, in suggesting possible careers.

*‘...reading about things in the paper, my grandad's very much “read this article” and he'll like print me things out...I think that was a big influence...my dad would say “what about law”, and I must have started researching it and thought I was quite interested in it.’*

Olivia

The implication was that information, particularly around career choices rather than subject choices specifically, had been given rather than advice and this had certainly steered her thinking in a particular direction.

Qabilah had also talked through potential career options with her father:

*‘Q: I asked my dad about it [law] and I think I looked up about it as well. I found out, you know, they wear the cool wigs and they have all the clothes...  
I: What did your dad say when you said “this is what I want to do”?  
Q: He was like ‘OK, great, I can see why chatterbox!’ [laughs] But no, he told me “this is what you need to do”, he told me “you need to talk to people, you need to research it”, obviously. He was really happy, he was fine about it. He was like “you probably will change your mind” but...’*

Qabilah

Both of these examples illustrate the social capital which the students have. They are confident in independently researching potential options and are given articles which,

because of their ability and strong literacy skills, they can access. This independence is a theme that emerges when parents do give advice rather than information. In the instances where this occurred the students' response was to ignore their parents.

*'Yeah, I think my parents and my teacher want me to [do A2 Chinese] but I don't get easily swayed by other people's opinion. I mean, if I think that it's going to have too much of an impact on my A2s and getting into university I'm just going to tell them that I'm not going to do it.'*

Rosie

Students here appear confident in discussing their choices with their parents but do not seem to be particularly influenced by them.

Two clear findings emerge from this discussion of structural factors. The first is that students have a clear notion of subject hierarchy and this has a role in their decision making. The second mirrors the findings of previous studies in that structural factors appear less important than individual attributes in subject choice post-14. In particular, teachers (including the Headteacher) and parents play a role in providing information regarding subject choice and careers but this does not appear to be an important factor in their decision making. However, while this may be a function of the students' high-ability – Stott *et al.*, (1997) found that lower ability students were more likely to be influenced by parents and friends – it may also be a function of the way in which the students told their stories. Individual attributes of enjoyment and usefulness in particular came to the fore in their discourse over structural factors but this does not necessarily mean that they are more important, just that the students discussed them more explicitly. It also may be because the choices of the students accorded with the expectations of the parents. None of the students in this study discussed the influence of their parents in negative terms nor in ways that suggested they had a particularly significant role to play. I suspect however, that if any of the students had selected a subject that their parents did not agree with that this would have been different; that the influence of the parent would have been stronger and seen in more negative terms.

## 12.7 The importance of different factors at different points in time

The *ex post* methodology employed provided an opportunity to explore whether or not the factors affecting subject choice and GCSE and A level were similar or different, something which previous studies have not attempted (Chapter 5). A summary of the important factors for each student is shown in Table 12.1. If a particular factor appeared to dominate their decision making this is shown in bold.

*Table 12.1 The important decision making factors at GCSE and A level*

<b><i>Student</i></b>	<b><i>Important factors at GCSE</i></b>	<b><i>Important factors at A level</i></b>
Marie	<b>Interest</b> , academic subjects	Interest and enjoyment, facilitating, further education, ability and understanding, social acceptability, associated and complementary subjects
Naomi	<b>Interest and enjoyment</b> , French and German family friends, liked the teacher, coping strategy	Ability and understanding, social expectations, school structures, further education, associated and complementary subjects, satisfaction, application to the real world, prefer science to arts
Olivia	<b>Career</b> , enjoyment, ability	<b>Career</b> and restrictions associated with career, interest and enjoyment, makes you stand out
Philippa	Useful, interest and enjoyment, restricted by coursework and abilities of parents	<b>Interest and enjoyment</b> , useful, associated and complementary subjects
Qabilah	Ability, enjoyment and interest, House Drama captains	Ability, enjoyment, career
Rosie	<b>Enjoyment</b> , associated and complementary subjects, parents, ability, effort	Enjoyment, <b>future prospects</b> , <b>ability</b> , other students, teachers and parents opinions
Sabah	<b>Usefulness</b> , ability, crossed subjects off rather than actively picked, risk	Nothing new, useful, associated and complementary subjects, career
Tabitha	<b>Enjoyment</b> , teachers	Prefer science to arts, useful, variety, further education, sister



There are several important points to note from this. Firstly, students' decision making is complex so that sometimes an over-arching factor dominates while at other points subjects are treated individually. Naomi, for example, tended to choose her GCSE subjects because she was interested in them and enjoyed them, this was her over-arching motivation. However, she specifically chose to study French and German because the family had friends who she wanted to communicate with. Similarly, Qabilah described herself as an all-rounder in terms of ability and generally chose subjects that most interested her. However, although she both enjoyed and was good at drama she was put off studying this at GCSE level because of comments made by older girls who had chosen it.

Secondly, it appears that different factors are important for different students at both GCSE and A level. Interest and enjoyment are mentioned by all students except Sabah at GCSE level although this is not always the most dominant factor. Olivia was very clear that she wanted to follow a career in law before she made her GCSE choices and therefore this was the main driver of her choices. Having used this as a filter she then considered her ability and enjoyment of subjects at an individual level. As a result, despite being better at and preferring geography to history she chose to study the latter at GCSE because she felt it would ultimately be more important for her career.

At A level although interest and enjoyment were still important the usefulness of subjects for further education and potential careers became more dominant with all students mentioning that this was a consideration, albeit not necessarily the most important one. It was also interesting that at this level half of the students – Marie, Naomi, Philippa and Sabah – suggested that they had taken subjects that complemented and overlapped each other.

*'...definitely some subjects come easier and subjects with overlaps, like we do a whole lot of mechanics in physics which is easy because we've just done it in maths. So that's fine. But if you don't take maths you're at a disadvantage.'*

Marie

*'...and I'm very glad I took maths and I did it the best way. I took it for AS and then I dropped it, because it grounded my understanding in chemistry. So the maths questions in chemistry help fix what you're taught. Whereas, my friend who's going to do biochem at Oxford didn't do AS maths and she has to think about them. Whereas, I can just manipulate this, do this, do that and bam. I can't do all the crazy, fancy stuff they do now but I have more of a mathematical understanding. I mean, logs and things come into chemistry at A2 was maths AS'*

Naomi

In addition to different factors being important at different points generally, at an individual student level it also appears to be the case. All of the students, with the exception of Olivia whose career aspirations dominate both her GCSE and A level choices, cite either a different range of factors or put emphasis on different factors at each stage. Marie's most important factor driving her GCSE choices is interest and enjoyment. While this still features at A level, other factors including whether her choices are socially acceptable given her academic ability, useful and facilitating for further education and complement her other subjects are considerations. Similarly, Tabitha chose her GCSE courses by considering those subjects which she enjoyed and cited the teacher as being an important aspect of this. At A level she described a greater range of factors which were important. These were more focused on the usefulness of subjects to further education but also included variety and her preference for science subjects rather than the arts.

A key finding from this is that students tend to make decisions at GCSE in a different way to those they make at A level. Individual attributes appear more important than structural factors at both points but a range of factors are taken into account. At GCSE level, enjoyment, ability and usefulness all appear important, albeit to different degrees to different students, whereas at A level the focus is more on usefulness for careers or further study.

## 12.8 Case study: Rosie

The third in-depth case study chosen to illustrate factors affecting subject choice is Rosie. Out of all of the students she was the one who described the process of choosing her GCSE and A level subjects in the most detail. She was also able to articulate the differences between Chinese and English culture and discussed structural factors at length; features which were not always present or clear in other students' discourses.

Rosie was a Year 12 student who stated that her ethnicity as Chinese. She had spent the first seven years of her life living in China and being educated at an international school before moving to the UK in Year 2. She was an only child living with both her mother and father. Rosie had just taken AS level exams in biology, chemistry, physics, maths, Further Maths and Mandarin Chinese and took geography to GCSE level. She was keen to go to university and wanted to study engineering.

*'I'd like to go to university at some point, maybe not immediately. I'm thinking I might do an engineering year in industry before I go to university, just to see whether I like it...It seems like a fun thing to do...but I'm not sure whether I think that because I know they get paid a lot.'*

Rosie

Rosie was a keen musician and spoke at length about her relationship with music. This provided some insight into her motivations and mindset more generally. She explained that she really threw herself into the things that she enjoyed but if she disliked something was likely to refuse to do it. She had started to play the piano aged five but did not enjoy practising and so had stopped for two years.

*'I think my parents were sick of paying for my lessons and me not practising. I felt I was pushed into it. I wasn't. My parents never pushed me to do anything except for maths, and there wasn't much of that either, 10 questions a day isn't a lot...I was told that I was quite good at it [the piano] when I was younger because I could...sit still and practice. And then I did it for about three years and I really hated it...I changed teachers several times during that period and I had teachers who really weren't that interested in teaching me.'*

Rosie

This is interesting as it illustrates the relationship that Rosie has with various people and the effect on her motivations. While she says that her parents do not push her into maths there is an underlying assumption that this is a subject which is important to them. It is also interesting that she ascribes her early ability in music not to actually being musical but being able to sit still and the lack of relationship with her piano teachers is clearly demotivating.

Rosie explained that she started playing the piano again in Year 7 with a new teacher with whom she developed a good relationship. Having now reached a good standard she found practising the piano relaxing and contrasted this with her formal studies.

*'...there's just something very calming about sitting down. You don't have to worry about the stuff that you have to do at school and there's no pressure for me to do exceptionally well.'*

Rosie

This enjoyment, which stems from a good relationship with her teacher and the lack of pressure to do well, meant that Rosie practiced regularly and often for a couple of hours at a time. She explained that she was able to see the clear progress that she was making as a result and this encouraged her further.

*'I think especially at this school there's a tendency for girls to be really critical of what they do...and every now and again if you just look back you realise that you do make progress and you should believe your teachers now and again. They're not just saying it just to be nice!'*

Rosie

These insights into how Rosie views both formal and informal education are useful in contextualising her subject choices. She explained that she had decided that she was going to do maths and science for the rest of her life in Year 7 and so her A level choices were selected very early.

*'Yeah, those were the subjects I liked and I knew that was the thing that was going to be developing in the future. But what was really interesting was that I thought I was always going to be a biochemist...I'm not sure whether it's because of the stereotype of biology being the girl science'*

Rosie

While Rosie is not explicit about the reasons why she enjoys maths and science her subsequent points make clear cultural statements and stereotypical assumptions. She considers a stereotypically masculine subject, science, to be an option but, when choosing which science opts for biology which she explains is stereotypically seen as the 'girl science'.

Later in her interview she explains that while there appears to be a clear subject hierarchy in the UK, in China it is much more evident; maths is the most important, followed by science and playing the piano. She was clear to distinguish between music as a subject and playing the piano outside of school which was seen to be more prestigious. Rosie also explained that maths and science were seen as vital to be globally competitive and this was where future development was likely to be concentrated. It does however, beg the question as to whether Rosie's ability in maths and science or in playing the piano is innate or whether she acquired ability through practice, which at least in part, appears directed by her parents into subjects seen as valuable by society. While there is not room to discuss this in depth within the confines of this thesis it is an important question to ask given that ability entwined with

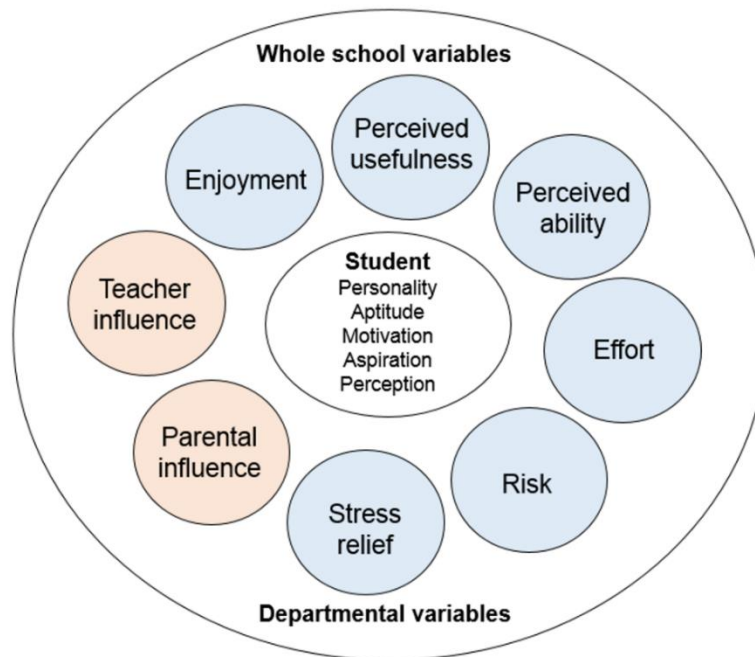
enjoyment and usefulness appear to be the drivers of decision making post-14. While these individual attributes seem superficially more important, perhaps it is the way that society shapes parental decisions, particularly regarding the opportunities and messages that they give their children, that has a deeper influence.

This detailed and deep description of Rosie's decision making in this section and throughout this chapter reflects the factors identified in subject choice theory (Adey and Biddulph, 2001; Biddulph and Adey, 2003; Ferretti, 2007). She appeared to select subjects at GCSE level based mainly on enjoyment, although she is also aware of those subjects she has ability in and those which are complementary and regarded highly by her parents. At A level she is much clearer that it is her future prospects and ability which dominate her decision making. Enjoyment is still important, but less so, as illustrated by her decision not to carry on with A level music. However, Rosie's stories deviate from subject choice theory in two main ways. Firstly, the amount of effort required is a factor in her decisions at GCSE level but does not feature in any of the associated literature. Rosie is pragmatic; while she generally chooses subjects that she enjoys, her decisions are also based upon her ability to maximise her grade for the least amount of effort. This is likely to be a result of Rosie being of high-ability in a number of subjects. She is able to discriminate in this way because the whole suite of GCSE options is open to her. Secondly, subject choice theory focuses decision making upon subjects which are taught formally in school. From the description detailed in this section it is clear that Rosie's relationship with playing the piano out of school has an influence on her subject choice, particularly at A level. After initially choosing to take music she decides to take Further Maths instead, partly because she believes she is better at maths and so getting a better grade will be important for getting into university and partly because playing the piano relieves the stress of school. If she were to continue with music academically then this outlet would become part of the issue.

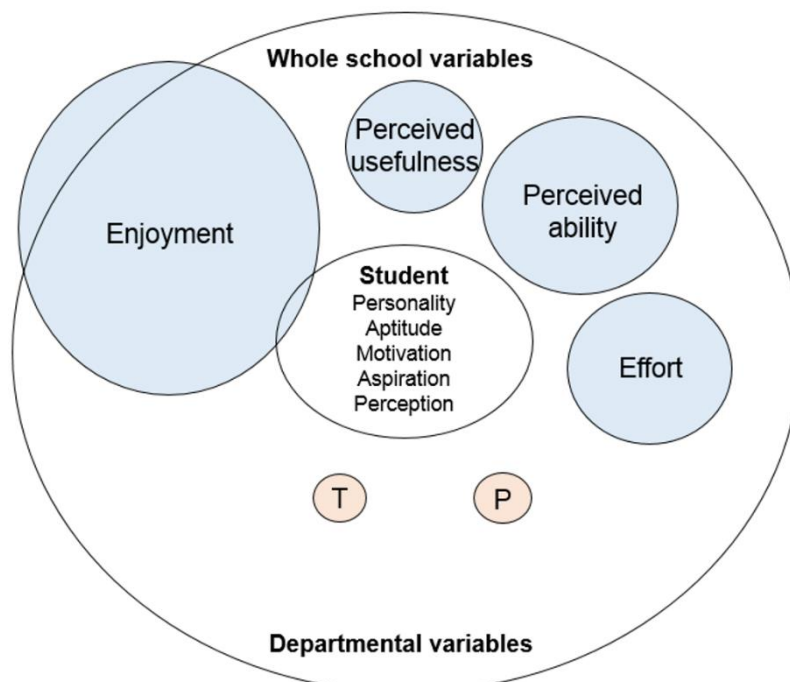
As a consequence of these findings I have modified subject choice theory as detailed in Figure 5.3 to reflect the different factors which appear to operate at different decision making points. The general theory can be seen in Figure 12.4.i while Rosie's decision making as I see it is described in Figure 12.4.ii and Figure 12.4.iii at GCSE and A level respectively. While this revised model is unable to capture all of the factors affecting

student subject choice at GCSE and A level it is a useful tool for beginning to describe the importance of different factors which are recurrent in the literature (see Chapter 5) and which emerge from my findings detailed in this chapter.

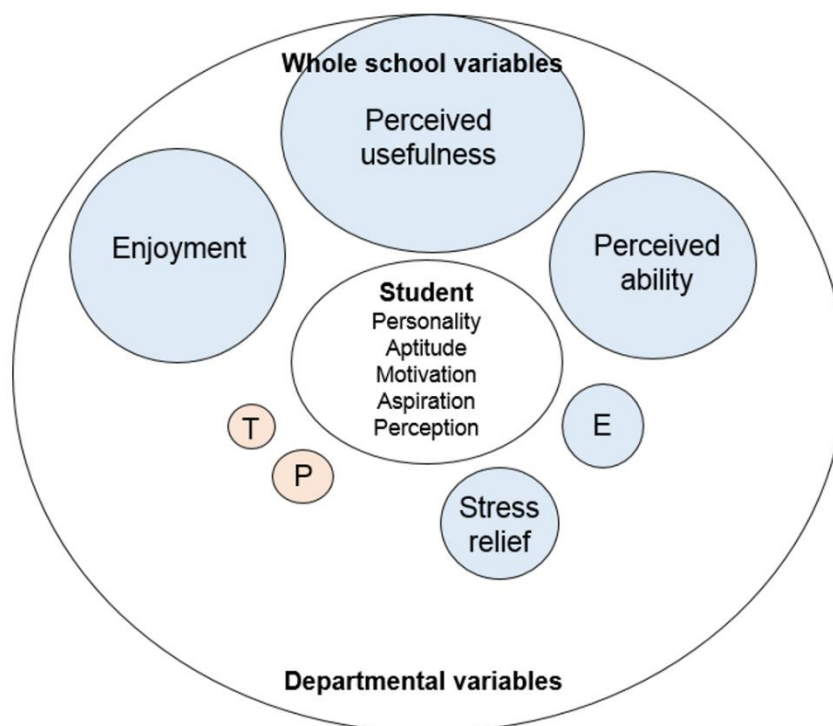
i. General model



ii. Subject choice theory illustrating the influences on Rosie's GCSE choices



- iii. Subject choice theory illustrating the influences on Rosie's A level choices



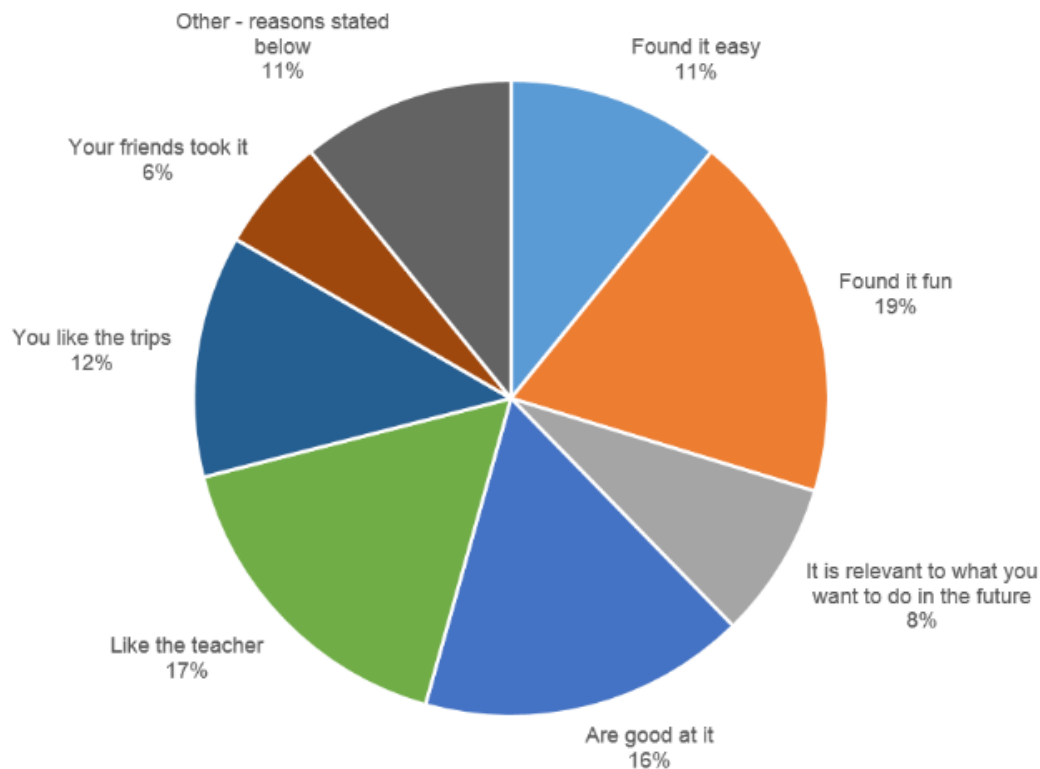
*Figure 12.4 Developing subject choice theory*

## 12.9 The findings from students as researchers

The five students who took part in the students as researchers project produced two separate research reports focused on the opinions of their Year 10 peers; 'What are the factors contributing to students choosing geography at GCSE?' and 'What influence do parents have on the choosing of GCSE options?'. I have highlighted their findings in a different font so that it can be distinguished from my commentary. I have also not changed or altered their reports in any way; their words, findings and conclusions are their own.



What are the factors contributing to [Year 10] students choosing geography at GCSE?



*Figure 12.5 A summary of the reasons why Year 10 students chose to study geography at GCSE.*

We can conclude that from the pie chart [Figure 12.5], the majority of people chose to take Geography for GCSE because they found it fun (19%), like the teacher (17%) and are good at it (16%). This perhaps suggests that teenagers currently studying for their GCSEs, in order to remain engaged in an activity that if given the choice would perhaps prefer not to partake in, have to find a particular element of it fun and have a good rapport with their teacher. Statistics show that only 6% of students took Geography because their friends took it, inferring that the majority of students took it by their own accord.

Other reasons why students opted to take GCSE Geography encompass:

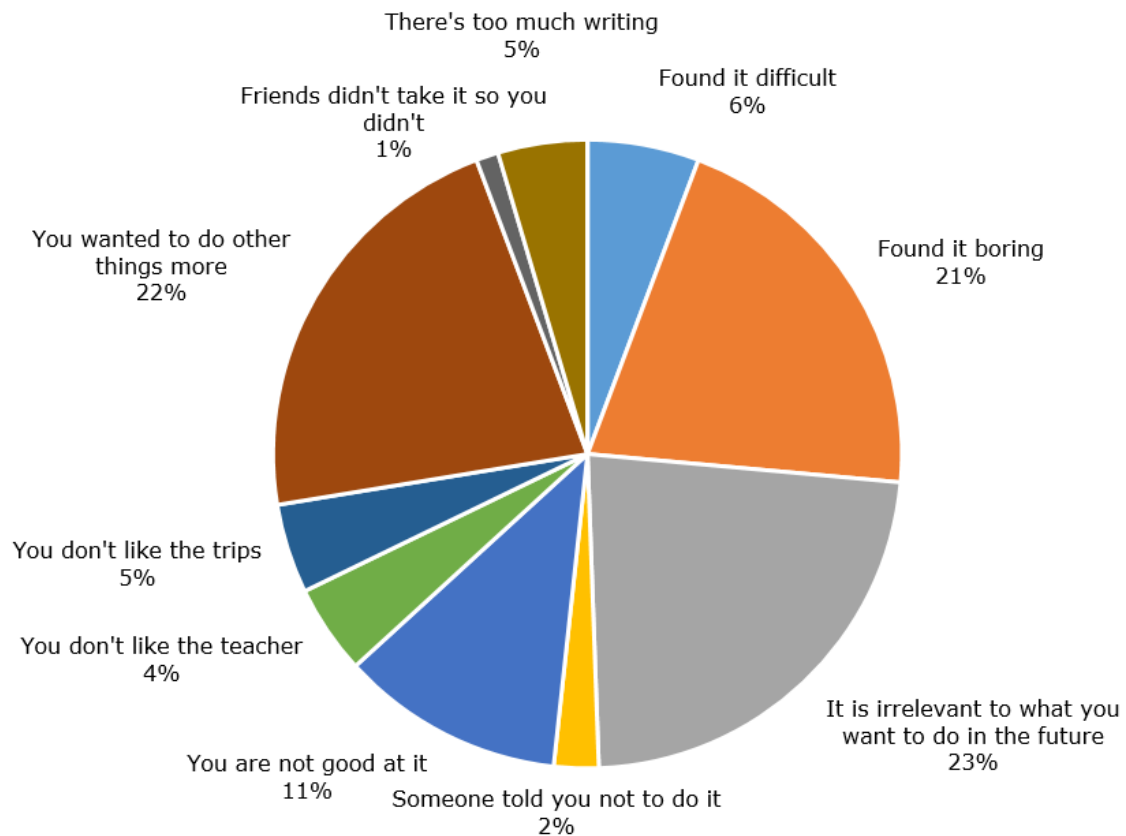
- They didn't like the other subjects (History or RS)
- They are getting mainly A\* in their assessments
- It looks good on a CV

This finding mirrors my own in that perceived ability and enjoyment of the subject are both important factors for students choosing geography at GCSE. However, it is also interesting that whether or not they like the teacher is also a very significant reason, something that featured in Naomi and Tabitha's interviews as a factor at GCSE level but which was otherwise not a theme that strongly emerged from my data. Perhaps this is because the students in my study were in the sixth form and a range of factors had influenced their most recent choices. While enjoyment – which could be affected by the teacher - was one of these, it appeared less important than factors such as choice of career and further education. The students in this study had just started their GCSE courses and therefore are more likely to have chosen their subjects because they enjoyed them.

It is also interesting that only a small proportion of those who took geography (8%) felt it would be useful to them for future careers. This is an important finding given that one of the dominant reasons for choosing subjects at A level is their usefulness. It is concerning that these students taking geography at GCSE do not see how the subject could be useful to them in the future which suggests that they may not choose to study it further.

Overall, we can conclude that 89% of the responders were satisfied in their choice of GCSE Geography, the other 11% were not. This in turn suggests that the majority of teenagers are capable of making informed decisions concerning their futures, potentially influenced by some of the factors mentioned above but then either lose interest in the subject or immediately wish that they selected another humanities subject.

Again, the similarities between the SaRs' findings and my own are clear. Most students were satisfied with the choices that they had made. There were a few examples in both studies, of students who might have chosen differently in retrospect but generally they would not have made significantly different decisions. This suggests, as the SaRs highlight, that teenagers are able to make informed decisions about their futures and are generally happy with these choices.



*Figure 12.6 A summary of the reasons why Year 10 students chose not to study geography at GCSE.*

We can establish that from our findings [Figure 12.6], the main reason as to why students opted not to take GCSE Geography was because it is irrelevant to what they wish to do in the future (23%). Again, the reason that had the fewest responses (1%) was 'friends didn't take it so you didn't'. This proves to be interesting as the reason with the least responses in the previous pie chart 'friends took it so you did' interlinks with this one. A potential theme is suggested; students are becoming more independent and not reliant upon other people although this could be due to age and the continually maturing mind set of teenagers in a grammar school.

**Other reasons why students didn't opt to take GCSE Geography encompass:**

- They found it boring
- Doesn't make the person look clever

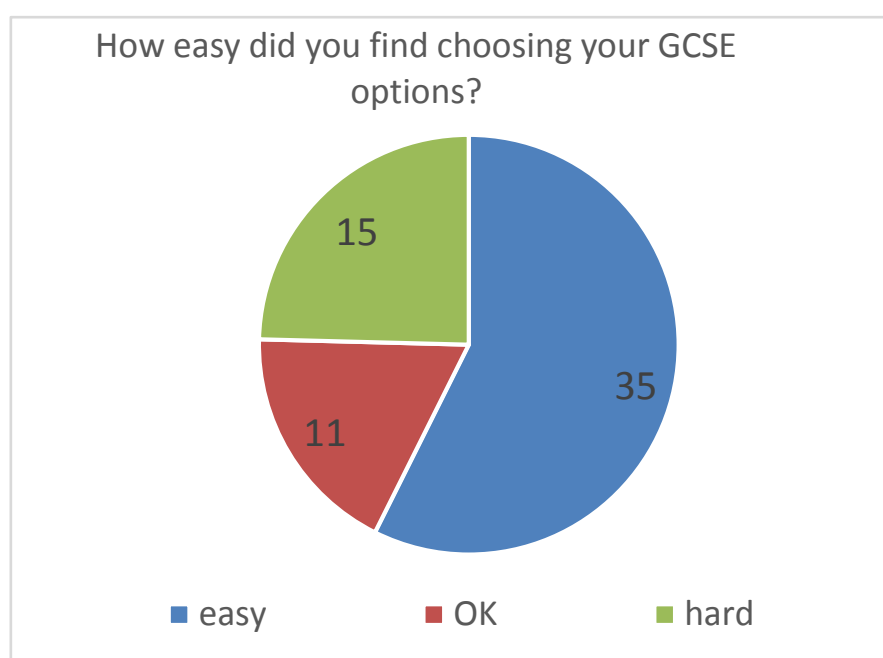
As discussed previously, it seems clear that students appear to have an idea of what they want to do in the future and that they do not see geography as being relevant or useful for that. However, there are other several points which warrant further consideration. Firstly, a significant proportion of students (21%) said that they found geography boring. The question asked by the SaRs did not specifically highlight whether it was the content or the way it was taught which was problematic and so it is difficult to make any definitive conclusions here. However, in my research it appeared that some resonance with the content was important; if students saw the geography being taught as inherently interesting then the way in which it was taught was less important. Secondly, the fact that 5% of students felt that geography involved too much writing reflects findings by Adey and Biddulph (2001) and Biddulph and Adey (2003). While this is a relatively small proportion of students it is a concerning feature given the academic nature of students at Claytons and their relative ability to write extensively. Finally, the comment 'it doesn't make the person look clever' is an interesting one given geography's status as an EBacc and a facilitating subject, although it is unclear to whom it does not look clever. To an extent this dovetails with my findings on the status, image and identity of particular subjects within the school and particularly Naomi's comment when asked whether she thought geography was academic:

*'Yes, well, it's a social science [laughs] and I guess it depends on your point of view. So, I think it's perfectly valid but...'*

Naomi

Within the context of an academic, highly achieving and single-sex girls' school geography appears to have lower status than some other subjects which are not specifically identified in the SaRs' questionnaire but which were identified by students in my research strand as the sciences and maths.

What influence do parents have on [Year 10] pupils' choice of GCSE options?

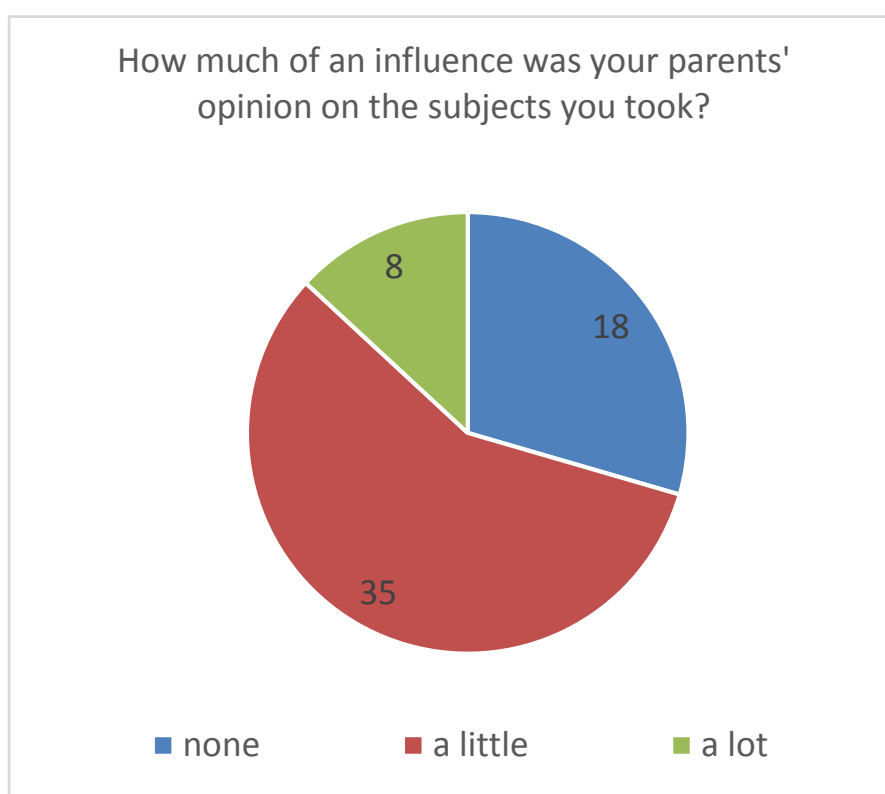


*Figure 12.7 How easy was choosing your GCSE options?*

We found [Figure 12.7] that most people found it pretty easy to choose their GCSEs (57% found it easy and 18% found it OK). Looking at people's comments, some of the people who said 'OK' found most of their subjects easy to choose but found one or two difficult. For example, some of the comments were 'easy – I just didn't know which two to chose from RS, history and geography' (questionnaire 11) and 'quite easy – although there were two things I wanted to do [history or business studies] but I couldn't choose two which was annoying' (questionnaire 16). A quarter of people found choosing their GCSEs hard and there were two reasons to explain this. Some people said that they wanted to do more GCSEs and so found it difficult to choose a limited number and others said that they would have liked to have known more about the subjects so that they could make better choices.

These findings regarding the ease of choosing subjects at GCSE level does, to an extent, mirror my own although this was an aspect not explored in detail. Typically, the students in my research who found the process difficult were those, such as

Qabilah, who had ability in a wide range of subjects or those, such as Olivia, who enjoyed them all. Most students in my study found most of their subjects easy to choose, indeed if they discussed any difficulty it was with the creative option block at GCSE level. Several of them attributed this to them not particularly wanting to do any of the subjects and so choosing the one that was least effort or which they said they were bad at but better than the other options.



*Figure 12.8 The influence of parents in choosing GCSE subjects*

When we asked people about the influence of their parents on their GCSE choices about 30% said their parents had no influence [Figure 12.8]. Most of the people that said this also found choosing their GCSEs easy or OK. The biggest group was 'a little' with 57%. Some people said that their parents had talked through their choices and gave their opinion but that it didn't really affect their choice. For example, people said things like 'not much, if they didn't want me to choose something they'd say but said it was completely my choice' (questionnaire 59) and 'there wasn't a lot of influence but they still

gave their opinion' (questionnaire 35). Two people said that their parents had talked about which subjects would be useful for their chosen career and to pick subjects that they enjoyed. Most people who found their choices hard had quite a lot of influence from their parents. Also, people said that their parents had most influence in choosing their creative. They said things like 'only on music which I was (made) to do – kinda, wanted to do it anyways' (questionnaire 5) and 'my parents didn't mind – they just told me not to take dance or music' (questionnaire 11) and 'my mum persuaded me not to take art' (questionnaire 19). One person had an interesting reason for taking one of their subjects they said that their parents had an influence 'only on Spanish because our family has Spanish origins' (questionnaire 47).

The students in this SaRs study seemed to be more influenced by their parents than the students in mine. However, this is perhaps a feature of the methodology; here the students were asked a direct question about the influence of their parents whereas in my study, references in the interview tended to be more implicit and inferred. Having said this, there are instances here where students suggest that their parents did not really have a influence and then seemingly counter this with a qualifier such as '...if they didn't want me to choose something they'd say...' (questionnaire 59). The implication here is that the choices were in line with parental and societal values and expectations; the student was mirroring these but attributing subject choice to themselves.

Those students who found choosing difficult, usually the creative subject, were more explicitly guided by their parents. While the reasoning behind the comments is not evident, several students were 'told' not to take particular subjects. It is interesting that the students seemingly acquiesced to their parents' suggestions as these subjects did not feature in the list that each student gave of the GCSE subjects that they had taken.

## 12.10 Conclusion

To summarise, the key findings from this chapter regarding students' post-14 subject choices are:

- if the students are engaged and enjoy lessons because of how it is taught then, post-14 they may choose to take the subject; this is more likely if they also find the content relevant.
- at A level, where enjoyment becomes less important, the student views of geographical knowledge become more so.
- unless the students can see the intrinsic usefulness of geography they are unlikely to choose to study it, particularly at A level.
- the students are more likely to see the subject as useful if they can see how formal geography lessons take them beyond their everyday knowledge.
- the students have a clear notion of subject hierarchy and this has a role in their decision making.
- the teachers and parents play a role in providing information regarding subject choice and careers but this does not appear to be a significant factor in their decision making.
- the students tend to make decisions at GCSE in a different way to those they make at A level. Individual attributes appear more important than structural factors at both points but at GCSE level, enjoyment, ability and usefulness all appear important, whereas at A level the focus is more on usefulness for careers or further study.

These findings are, to a certain extent supported by the findings from the two SaRs projects; in particular the role of parents and whether or not students see geography



as useful. However, arguably this chapter asks more questions than it answers. That the post-14 options process is a complex one is evident. However, the extent to which the individual attributes associated with student decisions are entwined with and reflect structural ones - particularly parental and societal perspectives and expectations – is unclear.

It is also important to consider the thesis as a whole and particularly the extent to which student representations of geography are linked to the choices that they make post-14. Again, attempting to extricate the various strands from this is challenging and due to the complexity of both representations and the decision making process any links that I make are tentative. However, bearing this in mind there does appear to be some evidence that if students' views of geographical knowledge resonate with aspects they believe useful for further study and careers then they are more likely to study the subject post-14 and particularly at A level.

## Conclusion to Part III

Having listened to the stories of the students and considered the literature and theories which have shaped both my analysis and discussion, this conclusion provides the opportunity to pick up the overarching theoretical thread of intersectionality which weaves throughout the part.

As explained in Chapter 3, intersectionality was selected as a lens through which to view this research because it took into account the multiple facets of student identities. While ethnicity was a starting point for this research I was also aware that the context of Claytons as a single-sex, grammar school was one which was both interesting and unusual within the UK education system where there are only 62 such schools in existence. However, in addition to exploring the interplay between ethnicity, gender, ability and socio-economic status and the situations in which each was dominant, I was also interested in the intersections, the spaces where more than one of these aspects combined. The notion of hybrid intersectionality – where students are dominant in some categories such as ability and socio-economic status, but submissive in others, for example gender and in some cases ethnicity – was an interesting one but also one which has proved problematic to mobilise in this part.

Throughout, I have attempted to make explicit how my findings can be viewed through the lens of intersectionality. In Chapter 10 and 11 my critique of both Bar-Gal and Sofer (2010) and Hawkey and Prior (2011) highlights the importance of considering multiple aspects of identity rather than focusing singularly on ethnicity. Similarly, the consideration of Qabilah, Philippa and Rosie as case studies enabled a rounded, multi-dimensional and detailed image of them to be created which is a function of the intersectional approach. Arguably, however, these are the products of viewing my findings through a complex theoretical lens and engaging an equally complex methodology. They do not get to the nub of intersectionality nor do they truly reflect the motivations and findings of the mainstream intersectional literature. Part of the reason for this is that the social justice agenda is a traditional driver yet this does not sit comfortably with my notion of this research. Given this, to what extent is intersectionality a useful lens to employ and how effective has it been in the context of my findings?

It is perhaps tempting to suggest that, because this research lacks the traditional motivation of intersectionality, it therefore presents a watered down and superficial version. However, I argue that instead of intersectionality-light, my research adopts an intersectionality-skewed approach. Hankivsky (2014: 3) outlines seven tenets of the theory:

- *Human lives cannot be explained by taking into account single categories, such as gender, race, and socio-economic status. People's lives are multi-dimensional and complex. Lived realities are shaped by different factors and social dynamics operating together.*
- *When analysing social problems, the importance of any category or structure cannot be predetermined; the categories and their importance must be discovered in the process of investigation.*
- *Relationships and power dynamics between social locations and processes (e.g., racism, classism, heterosexism, ableism, ageism, sexism) are linked. They can also change over time and be different depending on geographic settings.*
- *People can experience privilege and oppression simultaneously. This depends on what situation or specific context they are in.*
- *Multi-level analyses that link individual experiences to broader structures and systems are crucial for revealing how power relations are shaped and experienced.*
- *Scholars, researchers, policy makers, and activists must consider their own social position, role and power when taking an intersectional approach. This reflexivity should be in place before setting priorities and directions in research, policy work and activism.*
- *Intersectionality is explicitly oriented towards transformation, building coalitions among different groups, and working towards social justice.*

I believe my research accords completely with the first six of these seven tenets. If there is a way in which it deviates it is in motivation as I am not actively working towards transformation or social justice but understanding. Having said this, I do find the social justice principles identified by Griffiths (1998) compelling in outlining the impact of my

findings. The first principle is that there is no right answer, no utopia, and that establishing social justice is less about particular outcomes and more about processes. As I identify in Chapter 13, this thesis has started the process of reflection and discussion regarding ethnic minority representations and choices. However, as a socially just state of affairs requires continual checking and adjusting this must be the start rather than the end point. The second principle is that each individual is valuable and recognised as an important part of the whole community. I am clear that my findings do not attempt to develop a typology of students of different ethnicities and their particular representations of geographical knowledge. Instead, they have the potential to challenge the dominant, stereotypical view and to value individual stories. The third and final principle is that social justice is concerned not only with individual empowerment but with structural injustices; that some individuals, communities or parts of communities have greater power and resources than others. Is it the structural decision that the school, geography department and individual teachers make which serve to engender social injustice? In this regard, my findings pose rather than answer questions around the selection of topics within the parameters of examination specifications and the structuring of option blocks from which students can select their subjects for post-14 study. However, simply asking these questions begins to challenge the status quo and to disrupt the accepted school structures within which students and teachers operate. Therefore, while not an activist, perhaps my thesis does address issues of social injustice, at least in the way that Griffiths (1998) defines them.

Additionally, there are occasions where an intersectional approach revealed findings which otherwise would have been hidden from view. In Chapter 12 I explain that there was an expectation that, because the students were of high-ability and in an all-girls environment, they were often encouraged into subjects such as the sciences which are seen as traditionally masculine. In an effort to subvert gender stereotypes this 'can do' attitude in reality actually narrowed their choices and placed high expectations upon them; it became 'can do science and maths' rather than 'can do anything'.

Similarly, the pressure that some students felt as a result of being academically able girls was alleviated by engaging in a hobby, in many cases this was playing music. Their socio-economic status facilitated this – private music lessons and instruments

are expensive – and their academic ability in other areas meant that they did not feel as though they needed to take exams, instead they played for pleasure. Students explained that initially their parents were determined that they would take advantage of extra-curricular opportunities and they disliked playing at this early point. However, as they got older and more advanced and their ability in other subjects became apparent, the pressure to achieve reduced and their enjoyment increased.

The lens of intersectionality has thus provided a useful perspective for considering how students' represent geographical knowledge and the subject choices they make post-14. It has generated new and more complete data than a singular focus on ethnicity would afford; a feature which is vital in study which is exploratory.

## Chapter 13

### Conclusion: Looking backwards and looking forwards

#### 13.1 Introduction

This thesis posed the question:

**What does geographical knowledge consist of from ethnic minority perspectives?**

Unsurprisingly, given both my constructivist epistemology and case study methodology there was no single nor straightforward answer to this over-arching question. However, by engaging in a two-strand, two-phase methodology which involved students as researchers, questionnaires, collages, critical incident charts, semi-structured interviews and observation, I have created a multi-dimensional study which provides deep and rich description in answer to my three research sub-questions.

I found in answer to the first research sub-question 'How do students of different ethnicities represent geographical knowledge?' that the students appeared to have different and a more diverse range of representations than those described in previous literature (Kitchen (2011; 2013a; 2013b)). Geographical knowledge was represented in different ways given different methods, although the collages and interviews tended to reflect the students' most recent formal experiences of geography. In addition, students believed that geographical knowledge was important to be an educated, 21st century global citizen.

In answer to the second research sub-question 'How do the students' stories relate to their representations?' I found that the way in which the students tell their stories reflects the complexity of their lives. Students' representations of geographical knowledge were dominated by concepts from their recent formal experiences and mirrored the structure and characteristics of these. Informal experiences did feature

but these were not always explicit or straightforwardly definable; it is perhaps for this reason that formal experiences dominate.

Finally, in answer to the third research sub-question 'How do the students account for the subject choices that they made at GCSE and A level?', the research strongly suggests that if students do not relate to the geographical knowledge studied formally and see its intrinsic usefulness then they are unlikely to study it past GCSE level. This is a finding supported by the SaRs and attributed to decisions at A level being more focused upon potential future careers than other factors such as enjoyment which dominate at GCSE. Expectations that these high-ability girls would study traditionally masculine subjects, such as science and maths, was also a factor in their decision making.

Based on my research, the initial assumption that ethnic minority students represent geography in different ways to their White British peers appears unjustified and simplistic. Similarly, the stories that link with option choices are complex and intersectional; the identity of the students as middle class, high-ability girls in a single-sex environment appears more important than ethnicity alone.

## 13.2 Building on existing literature and theory

While Bar-Gal and Sofer (2010) have argued that students of different ethnicities have different views of the importance and purpose of geography, my research shows that representations of geographical knowledge are more complex and not drawn simply along ethnic lines. This is partly a function of the different methodologies employed, the scope of the two research questions and the context in which the two studies are located. To this end, perspective categorisation theory (Walford, 1996; Catling, 2004) was a useful starting point for conceptualising how students represent geographical knowledge but was too simplistic. By challenging the findings of Bar-Gal and Sofer and re-theorising the work of Walford and Catling, this thesis extends the understanding of how students represent geographical knowledge.

The findings of Hawkey and Prior (2010) suggest that informal experiences are dominant in the shaping of ethnic minority student views of school history and these conflict strongly with my own. Indeed, my findings suggest that it is formal experiences of geography which are most clearly articulated and present in student representations. Again, it is their methodology, the lens through which they view ethnicity and context which contrasts and perhaps explains the differences in findings. Specifically, history's national and inward-looking stance compared to geography's global and outward gaze and the authors' focus on students in urban conurbations where ethnic minority majorities predominate are likely to be of importance in this regard. Perspective influence theory (Martin, 2005; 2016; 2008 and Kitchen, 2011) attempts to get at the complexity of different factors which influence student views of geography. While students' stories are not clearly and articulately linked to their representations of geographical knowledge I have developed this theory in light of my findings so that it illustrates the relative importance of various formal and informal influences.

Post-14 subject choice is a complex process which Weeden (2007) identifies has both structural and individual elements. The findings of this study, which focus specifically on the latter, concur with those of Adey and Biddulph (2001); enjoyment, usefulness and ability are all important factors for students choosing geography at GCSE level. They also, to an extent, support the findings of Ferretti (2007) at A level. Although the students in my study do not articulate their ability as being a significant factor as they do in Ferretti's study, the focus on choices with particular careers and further education in mind are dominant.

### 13.3 Limitations to this research

Theorising students' views of geographical knowledge and the under and over-representation of ethnic minority students at GCSE and A level requires a full range of research epistemologies. There is certainly a place for studies such as Norman and Harrison (2004), Ferretti (2007) and Weeden (2011a) which investigate these in quantitative terms. However, there is also the need for interpretivist studies, such as



this one, which add meaning, detail and student voices to the statistics. This thesis acts to provide cumulation from previous studies, such as Bar-Gal and Sofer (2010) and Hopwood (2012) and also provides a foundation upon which others can build.

I do however recognise the limitations in the completeness of my knowledge. There are blank spots – existing questions yet to be understood which this research has gone some way towards narrowing – and there may be blind spots – patterns not yet noticed – in both the field of geography education research and in my own understanding. More specifically, there were incomplete data sets and questions not asked. While 314 students completed questionnaires in the first phase, there were 42 students in the sixth form who were absent and who did not. The response rate was high – over 83% - and yet these missing students may have skewed the data. Additionally, there are some instances (for example see Sabah's discussion of the water cycle in Section 11.4) where, in retrospect, I should have probed more deeply during interviews in the second phase. However, the importance of this only came to light afterwards during data analysis and there was no opportunity to return to gather this information.

### 13.4 Original contributions to the field

This research was designed to contribute an understanding of student views of geographical knowledge and post-14 subject choice to the field of geography education research. Here I have identified three specific and original contributions – one theoretical, one methodological and one ontological.

Firstly, established accounts of views of geography are simplistic. I have refined and expanded the theoretical conceptualisation of how students represent geographical knowledge and the influences on these representations. Representation categorisation theory and perspective influence theory consider the multi-faceted and complex nature of students' representations of geographical knowledge and the formal and informal influences on them, combined with the understanding that different methods encourage different representations to emerge. They thus provide new

theoretical starting points for those interested in researching students' representations of geography and the influences on students' views.

Secondly, established accounts of post-14 subject choice are predominantly quantitative and given by adults. I have employed an innovative qualitative methodology which values the stories of students and investigates post-14 subject choice from dual perspectives.

Thirdly, established accounts of ethnic minority representations of geographical knowledge do not exist in a UK context. I have added to the existing body of literature on students' views of geography, but my unique focus on those who are non-White British and my intersectional lens has given a new and different perspective.

### 13.5 The impact and implications of my research

Bearing these original contributions in mind it is important to consider the impact and implications of this new knowledge for a variety of actors; for teachers, parents, students, policy makers and for myself, both as a professional and as a researcher. At the start of my research journey I found the open, exploratory approach problematic in articulating the potential impacts and implications of my work. However, the process of doctoral research has forced me to grapple with notions of identity and alternative discourses and this prompted a realisation that I was seeing 'impact' in a singular, tangible and definite way. My research has shone a light on students' stories to move away from a single ethnic narrative; I have shone a light where there was not one before. Therefore, this section is as much about the impact and implications of process as it is about the impact and implications of my findings (see also Appendix 13.i).

## Implications for teachers

Arguably, this research has the greatest potential to create widespread ripples of impact if the new knowledge it generates resonates with geography teachers in other contexts and with teachers in other subjects. Having a role for an organisation with a prominent national and international reach provides enormous potential for both the dissemination of my findings and discussion with teachers to determine areas of resonance and dissonance with their own practice. I have already started the process of dissemination with my findings built into CPD which I am running for both the Geographical Association and the British Council, two forthcoming articles in *Geography*, and a reporting research session at the 2017 Geographical Association annual conference.

Yet, practically, what are the likely implications of my findings for teachers? The findings shed light upon how students represent geography and the post-14 choices they make and so, those factors within a teachers' control could be addressed to be more inclusive. For example, it is clear that if students cannot see the intrinsic usefulness of geographical knowledge that they are unlikely to study the subject at A level. Telling high-ability girls who aspire to be medics and lawyers that geographical knowledge will be useful for tourism or teaching is not going to have an impact. However, being explicit about how geographical knowledge may link to their chosen careers – for example, through geographies of health - may enable them to see its intrinsic importance.

In addition, this research has the potential to impact upon teachers who are neither geographers nor who work in selective, single-sex schools. High-ability, ethnic minority girls are schooled in a variety of contexts and yet they may struggle to be noticed as their voices are drowned out by others – by boys, by low-ability students who require more interventions or by White students who make up the student majority. Therefore, shining a light on these students and their stories is important so that teachers in these different contexts may begin to understand how they account for their subject choices.

While my findings are clearly important for teachers, so is process. It is easy to focus on the 'what' and 'how' of teaching - the content and the way in which it is delivered – at the expense of the 'who' – the students and the knowledge and experiences they bring. Part of the power of this research is the engagement I had with my students; I got to know them and they got to know me a little better than before. Clearly, it is unlikely that teachers would replicate this process given the depth of these stories and the volume of students that they teach. Yet, developing activities which allow students to represent their views of geographical knowledge without being tokenistic or reductionist is important. Perhaps asking students to create a collage or select an artefact which represents geography as part of their lessons might allow teachers to begin this dialogue.

However, there is a word of caution. As my findings have shown, students have individual and complex ways of representing geography and equally individual and complex ways of making their post-14 subject choices. Therefore, using these findings to create a curriculum is not a panacea for ensuring that option numbers, particularly those in under-represented groups, increase. Nor should an increase necessarily be seen as success if the choices that are made serve to narrow students' views of geographical knowledge.

### Implications for parents

The findings from this research generally suggest that parents have a supporting role to play in the options process. However, there are implications for parents in terms of the information that they are providing their children with to make these choices. For example, if parents are having discussions with students about the subjects that are likely to be 'most useful', then stepping back to consider '...for what?' is a clear first step. However, gathering information from sources such as university prospectuses and newspaper articles is likely to provide a more objective foundation for decision making compared to parents' own experiences of subjects. Resorting to stereotypes of both what geographical knowledge is and what it is useful for is unhelpful.

Similarly, as informal experiences tend to have an early influence on how students view geography then I would advocate making these experiences as varied and rich as possible. Giving children the opportunity to visit and experience natural landscapes, to explore a variety of places –as Philippa’s parents did – is likely to give them a conceptual basis rather than learning capital cities and flags which is likely to give them a factual one.

### Implications for students

The implications for students can be identified both in terms of the students who invested their time and energies into this study and also in terms of students more generally. The eight case study students appeared to find the process enjoyable. They explained that they had never had the opportunity to talk about their choices and their views of a subject before and they found it interesting and, in some cases surprising. Several of them asked questions about what I was doing and why. They seemed genuinely interested in understanding why a busy teacher would take on a research project. This became a leveller in the dynamics of power between myself and the students as this unprompted discussion created a common connection; we were all grappling with the challenge of academic demands – for them, A level and for me, the EdD - and how these fitted into our lives. In addition, for those still studying geography at A level the process of creating the collage appeared to have a positive impact on their studies. It enabled the distillation of geographical knowledge and the identification of synoptic links and the students suggested that this provided clarity to their thinking.

The Year 10 students involved in the SaRs strand of research also appeared to value their involvement; two of them mentioned the research on their record of achievement contained in their end of year school report. For most of them I was their form tutor and the nature of the sessions enabled us to develop a unique relationship and one which proved valuable beyond the boundaries of the study. In addition, developing their own research question, carrying out data collection and then analysing and writing up their findings honed transferrable skills that they found useful in the context

of their GCSE studies. Perhaps most significantly however, is the innovative methodological contribution that they made to this study. It was a risk to turn over part of my thesis to these 14 year olds, yet it was one that has proved effective. I hope that an implication of this is that other researchers feel empowered to involve students in their work, particularly in areas that directly affect young people's lives.

For students more generally, being more cognisant about the reasons behind their subject choices post-14 and more informed about both the process and qualifications required for further study and careers is likely to be helpful. Providing such information or at least links to where it can be found, is a recommendation I make to schools guiding students through the options process.

### Implications for policy makers

This research is small-scale and therefore suggesting implications for those closest to its context, the teachers, parents and students at Claytons, is most straightforward. More challenging is considering the policy implications of this study and why it matters on a larger scale. Generally, I think it important to state here the importance of both practitioner-research and students as researchers in shedding light on issues and perspectives which might otherwise not be illuminated. Yet, the opportunities for these are narrow. Funding appears directed at more traditional PhD routes or those studies which can demonstrate generalisability to wider contexts. The motivation for practitioner-researchers is often personal, an issue that arises from your own practice, and this often jars with these well-established routes. While there are innovations such as the Research Schools Network<sup>120</sup> and grass-roots organisations such as researchED which seek to value and celebrate such research, more could be done to encourage practitioners to engage in research driven by their own interests rather than organisational ones.

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<sup>120</sup> The Research Schools Network is a joint initiative by the Education Endowment Fund and the Institute for Effective Education set up in 2016 and designed to bridge the gap between research and practice. As it is in its infancy there are only eight schools currently part of the network, although the aim is for these schools to support others in their local area. For more information see <https://researchschool.org.uk/>

Similarly, students as researchers worked within the context of this study because I had prolonged access to the students, I had a good and well-developed relationship with them and they were motivated. Coupled with this, I had some experience in carrying out research myself. If any of these key ingredients had been missing then it would have proved too risky and ineffective to either include their findings within this thesis or to continue the project at all. Yet, methodologically their contribution has provided innovation within this study and served to generate new knowledge; their contribution is highly valuable. Developing a formal training programme for teachers interested in engaging students as researchers or an accredited qualification to acknowledge the skills and contributions of the students themselves may be ways of doing this practically.

Finally, we are currently going through a period of curriculum change; the A levels, GCSEs and KS3 courses that the students in this study experienced have been reformed. Within my sixteen year teaching career this process of change occurred at least three times – although not always at the same time for all Key Stages – and no doubt it will occur again in the future. While in the latest iteration the ALCAB board formed of geography academics created the list of core content for the A level examinations, the GCSE orders came from the government Department for Education, albeit after consultation. A clear implication from my findings is that the content contained within these orders needs to include geographical knowledge that is useful for being an educated, 21<sup>st</sup> century global citizen. The next time curriculum change occurs I would advocate that policy makers consult with and listen to the students; to understand what they believe is important, to give them more of a voice in the curriculum they experience.

#### Implications for me as a professional

This research has significant implications for me as a professional. As I explained in Chapter 1, I would have enjoyed the challenge of seeing how the implications of my findings played out within the context in which they were conceived. However, as I am no longer a teacher at Claytons I no longer have insider access and while this is

frustrating, my new role both enables and has been enabled by this research. My dual identity as a practitioner-researcher was problematic; other teachers struggled to see how I balanced each aspect. Now, as a researching-professional my career dove-tails with my researcher identity. This not only makes me more comfortable but also more effective. This research has developed my understanding of geographical knowledge, of the Geographical Association and of geography and its place in post-14 decision making. It has thus provided me with a strong foundation for carrying out my day-to-day role. I have found that both the curriculum making diagram (Figure 2.5) and representation categorisation theory (Section 10.10) that have been developed in this thesis are proving useful in the CPD courses that I run with geography teachers. The former to illustrate the importance of understanding student experiences within the classroom and the latter for geography teachers to begin to understand and conceptualise their own views of geographical knowledge.

#### Implications for me as a researcher

I am unsure where my research journey will take me next or what opportunities my current role affords in this regard. The process of writing this thesis has provided a cognitive and organisational challenge but has also equipped me with a range of honed and transferrable skills which must not go to waste. For example, my ability to edit my writing and to get to the point which I am making has improved, along with my confidence. I am keen to disseminate my findings and have taken several opportunities to do so; two articles for *Geography* are forthcoming and I presented a reporting research session at the 2017 Geographical Association annual conference. I have also developed a clear plan for future publications to ensure the impact of this research is planned and wide (see Appendix 13.i). Where though do I go from here? When I completed my Masters the next logical step was to complete a doctorate. However, I never had nor have any aspiration to become a full-time researcher. Indeed, being a researching professional, having an EdD rather than a PhD conflicts somewhat with this notion. My role in the Geographical Association, which is new and continually being shaped does afford some opportunities for research. For example, I am currently working with a small group to collect data for the Geographical



Association's second National Research Report on global learning (the first was conducted two years ago into Initial Teacher Education). While I have not designed the research nor will probably be involved in the writing of the final report, it has enabled me to engage in data collection which predominantly requires interviewing teachers. In this regard, the conducting of this research has prepared me well.

### 13.6 Suggestions for further research

Over the last decade several researchers have attempted to outline various gaps in knowledge in the field of geography education. Lambert (2015) identifies priorities drawn from a US context (Bednarz *et al.*, 2013) which include learning progressions (including assessment), effective teaching, exemplary curricula and the impact of fieldwork. While Roberts (2009b) identifies learners' prior understandings of concepts in human geography, learners' use and understanding of resources other than maps, processes of teaching and learning in real-life classroom situations and the investigation of issues through a range of scales, for example, from national policy to how it impacts on learning in the classroom, as matters of neglect. Superficially, this research does not appear to fit neatly within any of these identified priorities, however, its power lies in the fact that it weaves through many of them. My findings get to the heart of discussions about the nature of geography, students' representations and experiences and the decisions about what is taught and how.

Yet, this study is small-scale and set in a very particular and relatively unusual context. Further research is required on how ethnic minority students represent geographical knowledge in different contexts; in those where ethnic minorities are the majority, in co-educational schools, in primary schools, in those where there is great socio-economic diversity and where there is range of geographical abilities. Replicating my methods in these different contexts would begin to build up a more general picture and allow findings to be compared. In addition, in the same way that I found perspective categorisation theory effective as a starting point for the analysis of these representations, so I hope that others will do the same to engage in a robust critique of representation categorisation theory.

While there is some research focusing on geography in the context of students' post-14 subject choices, those which exist are predominantly focused on decisions at GCSE level, quantitative and over a decade old. In the context of the Ebacc which has the potential to alter the structures within which students make decisions and the messages such a measure has on the value of particular subjects, it is important that contemporary studies in the field of geography education focus on this, regardless of the fact that entry numbers at GCSE and A level are more robust than in previous periods which have instigated such research. There is also a need for research which centralises the stories of students as this one has done; that provide a more qualitative dimension to our collective understanding.

There is also scope to analyse the data from this thesis using a theoretical lens other than intersectionality. I made the decision relatively early on in the process that this study would not have a sociological focus; while I am interested in this angle and take the view, as I outline in Section 2.3, that the curriculum is inherently social, I wanted this research to reflect the individual stories of the students. However, the findings detailed in Chapter 12 in particular, suggest the potential for further research which uses Bourdieu's theories of habitus and cultural capital as a lens through which to view the data from this study (Bourdieu, 1984; Bourdieu, 1986; Wacquant, 2005; Navarro, 2006).

In education research more generally there is scope for studies which place my findings within different subject areas. For example, while some subject areas, notably science, have a fairly strong foundation of research into students' views of school subjects, researching representations of knowledge in other less researched fields such as history or maths would prove useful so that comparisons between subjects can be made.

Additionally, as highlighted above, there needs to be more research which enables students to engage in their own research. This could be in the form of action research projects which explore the efficacy of students as researcher programmes or other case studies in the field of education which actively use data generated by young people.

## 13.7 Endnote

This thesis centralises and values stories. I finish by telling a little of my own as this doctoral research journey has co-incided with and, in some respects, instigated a change in my own identity. While the product, this thesis, is the tangible outcome it is the process, emotion and relationships bound up within it which have had an immeasurable personal impact. Capturing even a small element of this has proved challenging but, inspired by the preface to Burnard *et al.* (2016), I hope the following provides some insight.

*I knew someone once,  
A teacher, a mother, a wife.  
She went on a journey.  
(Re) searching.  
She thought she was prepared,  
But she wasn't.  
And the journey challenged her in ways she did not expect.  
I thought I knew her well.*

*For she is me.  
But not me.  
The research engulfed her.  
Enabling, reshaping, frustrating, emancipating,  
Changing her character, career and identity.*

*The definition of her journey lies in your hands,  
But the power in the pages is infinite.  
It signals that her journey has ended...*

*...But that mine has just begun.*

## References

Abd-El-Khalick, F. (2004) *Assessing and Influencing Epistemological Views: The Moderate Fallacies of Inference to Beliefs from Action and Influence of Action on Beliefs*, paper presented at the annual meeting of the American Educational Research Association, San Diego.

Abd-El-Khalick, F. and Akerson, V. (2004) Learning as conceptual change: Factors mediating the development of preservice elementary teachers' views of nature of science, *Science Education*, 88 (5), 785 - 810.

Abd-El Khalick, F. and Lederman, N. (2000) Improving science teachers' conceptions of nature of science: a critical review of the literature, *International Journal of Science Education*, 22 (7), 665 – 701.

Abebe, T. (2009) Multiple methods, complex dilemmas: negotiating socioethical spaces in participatory research with disadvantaged children, *Children's Geographies*, 7 (4), 451 - 465.

Acheson, D. (1994) An analysis of how changing viewpoints in geography at university level have influenced school textbooks at GCSE and A level, in Slater, F. (ed.) *Reporting research in geographical education*, London: Institute of Education, University of London.

Adey, K. and Biddulph, M. (2001) The influence of pupil perceptions on subject choice at 14+ in geography and history, *Educational Studies*, 27 (4), 439 – 450.

Adichie, C. (2009) *The danger of a single story*,  
[http://www.ted.com/talks/chimamanda\\_adichie\\_the\\_danger\\_of\\_a\\_single\\_story.html](http://www.ted.com/talks/chimamanda_adichie_the_danger_of_a_single_story.html)  
retrieved 18/01/2013.

Agnew, J. and Livingstone, D. (2011) (eds.) *The SAGE handbook of geographical knowledge*, London: SAGE.

ALCAB (2014) *The A level Content Advisory Board*, Geography report  
<https://alcab.org.uk/reports/> retrieved 19/02/2017.

Alderson, P. (1995) *Listening to Children: Children, Ethics and Social Research*, Ilford: Barnardo's.

Alderson, P. and Morrow, V. (2004) *Ethics, Social Research and Consulting with Children and Young People*, Ilford: Barnardo's.

Alkis, S. (2009). Turkish geography trainee teachers' perceptions of geography. *International Research in Geographical and Environmental Education*, 18, 120 – 133.

Al-Nofli, M. (2010) Students' perceptions about Geography: A study of basic education school students in Oman, *European Journal of Social Sciences*, 16 (1), 11 – 20.

Anderson, G. (1998) *Fundamentals of Educational Research*, London: Routledge Falmer.

Andreasen, R. (2000) Race: Biological Reality or Social Construct?, *Philosophy of Science*, 67, 653 – 666.

Andreotti, V. (2007) An ethical engagement with the Other: Gayatri Spivak on education, *Critical Literacy: Theories and Practices*, 1 (1), 69 – 79.

Andrews, P. (2013) *Questionnaires and Surveys*, EdD Research Methods session, Faculty of Education, University of Cambridge, 14<sup>th</sup> March 2013.

Angelides, P. (2001) The development of an efficient technique for collecting and analyzing qualitative data: The analysis of critical incidents, *Qualitative Studies in Education*, 14, 429 – 442.

Anthias, F. and Lloyd, C. (2002) (eds.) *Rethinking Anti-racisms: From Theory to Practice*, London: Routledge.

AQA (2015) *GCSE Geography examiner's report 2015*,  
<http://www.aqa.org.uk/subjects/geography/gcse/geography-a-9030/past-papers-and-mark-schemes> retrieved 19/02/2017.

Arnett, G. (2015) *How well are women represented in UK science?*,  
<https://www.theguardian.com/news/datablog/2015/jun/13/how-well-are-women-represented-in-uk-science> retrieved 23/05/2017.

Arnot, M. and Weiner, G. (1987) (eds.) *Gender and the politics of schooling*, London: Hutchinson.

Atkins, L. and Wallace, S. (2012) *Qualitative Research in Education*, London: SAGE.

Baker, M. (2011) *History needs facts first, analysis later*, The Guardian,  
<https://www.theguardian.com/education/2011/jan/18/history-national-curriculum>  
retrieved 19/02/2017.

Bale, J. and McPartland, M. (1986) Johnstonian anarchy: Inspectorial interest and the undergraduate education of PGCE students, *Journal of Geography in Higher Education*, 10 (1), 61 – 70.

Bardell, G. (1982) *Options for the Fourth: The Report of an Explanatory Study in Ten Schools*, London: Schools Council.

Bar-Gal, B. and Sofer, S. (2010) Israeli students' perceptions of geography instruction goals, *International Research in Geographical and Environmental Education*, 19 (2), 127 – 137.

Barratt Hacking, E. (1996) Novice teachers and their geographical persuasions, *International Research in Geographical and Environmental Education*, 5, 77 – 86.

Barratt Hacking, E., Scott, W., Barratt, R., Talbot, W., Nicholls, D. and Davies, K. (2005) Listening to Children: using students' local environment experience in curriculum planning, *Environmental Education*, 79, 8 – 10.

Bassey, M. (1999) *Case study research in educational settings*, Maidenhead: Open University Press.

Bauman, R. (1986) *Story, performance and event: Contextual studies of oral narrative*, New York: Cambridge University Press.

BBC News (2012) *A level plans challenged by school and university heads*, <http://www.bbc.co.uk/news/education-21156370> retrieved 21/02/2014.

BBC News (2014) *International GCSEs to be axed from school league tables*, <http://www.bbc.co.uk/news/education-28108153> retrieved 19/02/2017.

BBC (2015) *AS and A levels*, <http://www.bbc.co.uk/schools/parents/alevels/> retrieved 21/05/2017.

Beck, J. (2012) Reinstating knowledge: diagnoses and prescriptions for England's curriculum ills, *International Studies in Sociology of Education*, 22 (1), 1 – 18.

Bednarz, S., Heffron, S. and Huynh, N. (2013) *A roadmap for 21<sup>st</sup> century geography education: geography education research*, [http://gisgeo.org/assets/files/NGS\\_RoadMapConcept\\_GERC\\_07.pdf](http://gisgeo.org/assets/files/NGS_RoadMapConcept_GERC_07.pdf) retrieved 21/05/2017.

Bell, J. (2001) Patterns of subject uptake and examination entry 1984–1997, *Educational Studies*, 27 (2), 201 – 219.

Bennetts, T. (2005) The Links Between Understanding, Progression and Assessment in the Secondary Geography Curriculum, *Geography*, 90 (2), 152 – 170.



BERA (2011) *Ethical guidelines for Educational Research*, [www.bera.ac.uk](http://www.bera.ac.uk) retrieved 3/11/2012.

BERA (2013) *Race, Ethnicity and Education Special Interest Group*, <http://www.bera.ac.uk/signs/info/race-ethnicity-and-education> retrieved 20/02/2014.

Biddulph, M. (2011) Articulating student voice and facilitating curriculum agency, *The Curriculum Journal*, 22 (3), 381 – 399.

Biddulph, M. (2014) What kind of curriculum do we really want?, *Teaching Geography*, 39 (1), 6 – 9.

Biddulph, M. (2017) Inclusive geographies: the illusion of inclusion, *Teaching Geography*, 42 (2), 46 – 48.

Biddulph, M. and Adey, K. (2003) Perceptions v. reality: pupils' experiences of learning in history and geography at Key Stage 4, *The Curriculum Journal*, 14 (3), 291 – 303.

Biddulph, M. and Adey, K. (2004) Pupil perceptions of effective teaching and subject relevance in history and geography at Key Stage 3, *Research in Education*, 71, 1 – 8.

Bilge, S. (2009) *Smuggling intersectionality into the study of masculinity: Some methodological Challenges*, [https://www.researchgate.net/publication/228998452\\_Smuggling\\_intersectionality\\_in\\_to\\_the\\_study\\_of\\_masculinity\\_some\\_methodological\\_challenges](https://www.researchgate.net/publication/228998452_Smuggling_intersectionality_in_to_the_study_of_masculinity_some_methodological_challenges) retrieved 03/03/2017.

Bilge, S. (2010) Recent Feminist Outlooks on Intersectionality, *Diogenes*, 225, 58 – 72.

Bird, J. (1996) *Black Students and Higher Education: rhetorics and realities*, Buckingham: Open University Press.

Birmingham City Council (2013) *Ethnic Groups*,  
<http://www.birmingham.gov.uk/cs/Satellite?c=Page&childpagename=Planning-and-Regeneration%2FPageLayout&cid=1223096353923&pagename=BCC%2FCommon%2FWrapper%2FWrapper> retrieved 20/02/2014.

Blaikie, N. (1991) A critique of the use of triangulation in social research, *Quality and Quantity*, 25 (2), 115 – 136.

Blaxter, L., Hughes, C. and Tight, M. (2002) *How to research*, Buckingham: Open University Press.

Bonnett, A. (1997) Geography, 'race' and Whiteness: invisible traditions and current challenges, *Area*, 29 (3), 193 – 199.

Bonnett, A. (1998) Who was white? The disappearance of non-European white identities and the formation of European racial whiteness, *Ethnic and Racial Studies*, 21 (6), 1029 – 1055.

Bonnett, A. (2003) Geography as the world discipline: connecting popular and academic geographical imaginations, *Area*, 35 (1), 55 - 63.

Bonnett, A. (2008) *What is Geography?*, London: SAGE.

Bonnett, A. (2017) What is Geography?, in Jones, M. (ed.) *The Handbook of Secondary Geography*, Sheffield: Geographical Association.

Bonnett, A. and Carrington, B. (2000) Fitting into Categories or Falling Between Them? Rethinking ethnic classification, *British Journal of Sociology in Education*, 21 (4), 487 – 500.

Bourdieu, P. (1984) *Distinction: A Social Critique of the Judgement of Taste*, London: Routledge.

Bourdieu, P. (1986) The Forms of Capital, in Richardson, J. (ed.) *Handbook of Theory and Research for the Sociology of Capital*, New York: Greenwood Press.

Bourdieu, P. (1990) *The Logic of Practice*, Cambridge: Polity Press.

Bourdieu P. (1991) *Language and Symbolic Power*, Cambridge, MA: Harvard University Press.

Bourner, T., Bowden, R. and Laing, S. (2001) Professional doctorates in England, *Studies in Higher Education*, 26 (1), 65 – 83.

Boxill B. (2001) (ed.) *Race and Racism*, Oxford: Oxford University Press.

Bracken, L. and Mawdsley, E. (2004) 'Muddy glee': rounding out the picture of women and physical geography fieldwork, *Area*, 36, 280–286.

Bradbeer, J., Healey, M. and Kneale, P. (2004) Undergraduate geographers' understandings of geography, learning and teaching: a phenomenographic study, *Journal of Geography in Higher Education*, 28, 1734.

Bradbury, A. (2011) Rethinking assessment and inequality: the production of disparities in attainment in early years education, *Journal of Education Policy*, 26 (5), 655 – 676.

Bristol City Council (2013) *The Population of Bristol*, <http://www.bristol.gov.uk/page/council-and-democracy/population-bristol> retrieved 20/02/2014.

British Psychological Society (2009) *Code of Ethics and Conduct*, [www.bps.org.uk](http://www.bps.org.uk) retrieved 3/11/2012.

Brooks, C., Poudrier, J. and Thomas-MacLean, R. (2008) Creating collaborative visions with Aboriginal women: A photovoice project, in Liamputtong, P. (ed.) *Doing cross-cultural research: ethical and methodological perspectives*, Dordrecht: Springer.

Brooks, C. (2006) Geography Teachers and Making the School Geography Curriculum, *Geography*, 91 (1), 75 – 83.

Brooks, C. (2010) Why geography teachers' subject expertise matters, *Geography*, 95 (3), 143 – 148.

Brown, T., McNamara, O., Hanley, U. and Jones, L. (1999) Primary student teachers' understanding of mathematics and its teaching, *British Educational Research Journal*, 25 (3), 299 – 322.

Brubaker, R. (2004) *Ethnicity without groups*, Cambridge MA: Harvard University Press.

Brubaker, R. (2009) Ethnicity, Race and Nationalism, *The Annual Review of Sociology*, 35, 21 – 42.

Bruner, J. (1984) Pragmatics of language and language of pragmatics, *Social Research*, 51, 969 – 984.

Bueno, O. (2013) Perception and conception: shaping human minds, *Biosemiotics*, 6 (3), 323 – 336.

Bulmer, M. (1996) The ethnic group question in the 1991 Census of Population, in Coleman, D. and Salt, J. (eds.), *Ethnicity in the 1991 Census of Population*, London: HMSO.

Burgess, R. (1989) *The Ethics of Educational Research*, London: Routledge Falmer.

Burgess, S. and Harris, R. (2011) Oldham lives: still parallel or converging?, *Research in Public Policy*, 21 – 23,  
<http://www.bristol.ac.uk/cmpo/publications/other/oldhambulletinarticle.pdf> retrieved 18/01/2013.

Burnard, P. (2011) Rivers of musical experience: a tool for reflecting and researching individual pathways, in Harrison, C. and McCullough, L. (eds.) *Musical Pathways*, National Association of Music Educators.

Burnard, P. (2012) Rethinking creative teaching and teaching as research: Mapping the critical phases that mark times of change and choosing as learners and teachers of music, *Theory Into Practice*, 51 (3), 40 – 52.

Burnard, P., Dragovic, T., Flutter, J. and Alderton, J. (2016) (eds.) *Transformative Doctoral Research Practices for Professionals*, Rotterdam: SensePublishers.

Butler-Kisber, L. (2007) Collage in qualitative inquiry, in Knowles, G. and Cole, A. (eds.), *Handbook of the arts in social science research*, Thousand Oaks, CA: SAGE.

Butt, G. (2008) Is the future secure for Geography education?, *Geography*, 93 (3), 158-165.

Butt, G. (2010) Which methods are best suited to the production of high-quality research in Geography Education?, *International Research in Geographical and Environmental Education*, 19 (2), 103 – 107.

Butt, G. (2012) Forward, in Hopwood, N., *Geography in Secondary Schools: Researching Pupils' Classroom Experiences*, London: Continuum.

Byers, R. (2014) *Participatory Research*, EdD Research Methods session, Faculty of Education, University of Cambridge, 30<sup>th</sup> January 2014.

Carrington, B. and Short, G. (1998) Adolescent discourse on national identity – voices of care and justice?, *Educational Studies*, 24 (2), 133 – 152.

Carswell, R. (1970) Evaluation of affective learning in geographical education, in Kurfman, D. (ed.) *Evaluation in geographical education*, Belmont, California: Fearon Publishers.

Carter, S. and Little, M. (2007) Justifying knowledge, justifying method, taking action: Epistemologies, methodologies, and methods in qualitative research, *Qualitative Health Research*, 17(10), 1316–1328.

Cashmore, E. (1996) *Dictionary of Race and ethnic relations*, London: Routledge.

Cassen, R. and Kingdon, G. (2007) *Tackling low educational achievement*, York: Joseph Rowntree Foundation.

Castree, N., Rogers, A. and Sherman, D. (2005) (eds.) *Questioning Geography*, Oxford: Blackwell.

Castree, N., Fuller, D. and Lambert, D. (2007) Geography without borders, *Transactions of the Institute of British Geographers*, 32, 129 – 132.

Catling, S. (2004) An understanding of geography: The perspectives of English primary trainee teachers, *Geo Journal*, 60 (2), 149 – 158.

Catling, S. (2005) Seeking younger children's 'voices' in geographical education research, *International Research in Geographical and Environmental Education*, 14 (4), 297 – 304.

Catling, S. (2013) Teachers' perspectives on curriculum making in Primary Geography in England, *The Curriculum Journal*, 24 (3), 427-453.

Catling, S. and Martin, F. (2011) Contesting 'powerful' knowledge: the primary geography curriculum as an articulation between academic and children's (ethno-) geographies, *The Curriculum Journal*, 22 (3), 317 – 335.

Catling, S. and Morley, E. (2013) Enquiring into primary teachers' geographical knowledge, *Education 3 – 13*, 41 (4), 425 – 443.

Catling, S. and Taylor, L. (2014) *Developing an International Declaration on Research in Geographical Education*, GTE conference presentation  
<http://www.geography.org.uk/gtip/gteconferences/previousconferencematerials/#2>  
retrieved 31/03/2017.

Chakrabarty, N., Roberts, L. and Preston, J. (2012) Critical Race Theory in England, *Race, Ethnicity and Education*, 15 (1), 1 – 3.

Chalmers, L., Keown, P. and Kent, A. (2002) Exploring different 'perspectives' in secondary geography: professional development options, *International Research in Geographical and Environmental Education*, 11 (4), 313 – 324.

Chandra, K. (2008) Ethnic invention: a new principle for institutional design in ethnically divided democracies, in Levi, M., Johnson, J., Knight, J. and Stokes, S. (eds.) *Designing Democratic Government: Making Institutions Work*, New York: SAGE.

Chapman, G. (2007) – geography: The Remains of a British Discipline, *Journal of Geography in Higher Education*, 31 (3), 353 – 379.

Chisholm L. and Holland J. (1987) Anti-sexist action research in schools: the Girls and Occupational Choice Project, in Weiner G. and Arnot M. (eds.) *Gender Under Scrutiny*, London: Hutchinson.

Cho, S., Crenshaw, K. and McCall, L. (2013) Toward a field of intersectionality studies: theory, applications and praxis, *Signs*, 38 (4), 785 – 810.

Clifford, N. and Valentine, G. (2010) (eds.) *Key Methods in Geography*, London: SAGE.

Cline, T., Abreu, G. de, Fihosy, C., Gray, H., Lambert, H. and Neale, J. (2002) *Minority Ethnic Pupils in Mainly White Schools*, London: Department for Education and Skills, <http://www.dfes.gov.uk/research/data/uploadfiles/RR365.doc> retrieved 11/01/2013.

Cloke, P., Crang, P. and Goodwin, M. (2005) *Introducing Human Geographies*, London: Hodder Education.

Coe, R. (2008) Comparability of GCSE examinations in different subjects: an application of the Rasch model, *Oxford Review of Education*, 34 (5), 609 – 636.

Cohen, L., Manion, L. and Morrison, K. (2000) *Research Methods in Education*, London: Routledge Falmer.

Cole, M. (2012) Critical race theory in education, Marxism and abstract racial domination, *British Journal of Sociology of Education*, 33 (2), 167 – 183.

College of Teachers (2013) *The Teacher Learning Academy (TLA)*, <http://www.collegeofteachers.ac.uk/tla> retrieved 13/04/2013.

Colley, H. (2010) Overcoming problems with data analysis in qualitative research, in Thomson, P. and Walker, M. (eds.) *The Routledge Doctoral Student's Companion: Getting to Grips with Research in Education and the Social Sciences*, Abingdon: Routledge.

Colley, A., Comber, C. and Hargreaves, D. (1994) School Subject Preferences of Pupils in Single Sex and Co-educational Secondary Schools, *Educational Studies*, 20 (3), 379 – 385.

Colley, A. and Comber, C. (2003) School Subject Preferences: age and gender differences revisited, *Educational Studies*, 29 (1), 59 – 67.



Connolly, P. (2008) Race, gender and critical reflexivity in research with young children, in Chistensen, P. and James, A. (eds.) *Research with children: perspectives and practices*, London: Taylor and Francis.

Connor, H., Tyers, C., Modood, T. and Hillage, J. (2004) *Why the Difference? A Closer Look at Higher Education Minority Ethnic Students and Graduates*, Institute for Employment Studies  
<http://www.bristol.ac.uk/ethnicity/documents/educationreport.pdf> retrieved 11/01/2013.

Cornell, S. and Hartmann, D. (2007) *Ethnicity and Race: Making Identities in a Changing World*, Thousand Oaks, CA: Pine Forge Press.

Cornwall, A. and Jewkes, R. (1995) What is participatory research?, *Social Science and Medicine*, 41 (12), 1667 – 1676.

Creswell, J. (2003) *Research design: Qualitative, quantitative and mixed method approaches*, Thousand Oaks, CA: SAGE.

Creswell, J. (2013) *Qualitative inquiry and research design: choosing among five approaches*, London: SAGE.

Cribb, J., Sibieta, L. and Vignoles, A. (2013) *Entry into grammar schools in England*, London: Institute for Fiscal Studies.

CRC (2013) *Children's Research Centre: Open University*,  
<http://www.open.ac.uk/researchprojects/childrens-research-centre/> retrieved 22/02/2014.

Crotty, M. (1998) *The Foundations of Social Research: Meaning and perspective in the research process*, London: SAGE.

Cullinane, C. (2016) *Gaps in grammar*, Research Brief: The Sutton Trust  
[http://www.suttontrust.com/wp-content/uploads/2016/12/Gaps-in-Grammar\\_For-website.pdf](http://www.suttontrust.com/wp-content/uploads/2016/12/Gaps-in-Grammar_For-website.pdf) retrieved 03/03/2017.

Cunningham, M., Lopes, J. and Rudd, P. (2004) *Evaluation of the Excellence in Cities/Ethnic Minority Achievement Grant (EIC/EMAG)*, Pilot Project: 104, Nottingham: DfES.

Dale, R. (2000) Globalization and education: Demonstrating a “common world educational culture” or locating a “globally structured educational agenda?”, *Educational Theory*, 50 (4), 427 – 448.

Data Protection Act (1998) *The Data Protection Act*,  
<http://www.legislation.gov.uk/ukpga/1998/29/contents> retrieved 18/04/2013.

Davies, P., Telhaj, S., Hutton, D., Adnett, N. and Coe, R. (2008) Socioeconomic background, gender and subject choice in secondary schooling, *Educational Research*, 50 (3), 235 – 248.

Davis, K. (2008) Intersectionality as buzzword: A sociology of science perspective on what makes a feminist theory successful, *Feminist Theory*, 9 (1), 67 – 86.

Davis, D. and Butler-Kisber, L. (1999) Arts-based representation in qualitative research: Collage as a contextualizing strategy, *Resources in Education*, 34 (11), 1 – 10.

Degotardi, S. (2011) Two steps back: exploring identity and presence while observing infants in the nursery, in Johansson, E. and White, J. (eds.) *Educational Research with our youngest*, Dordrecht: Springer.

Delgado, R. (2003) Crossroads and blind alleys: A critical examination of recent writing about race, *Texas Law Review*, 82, 121–52.

Deng, Z. (2009) The formation of a school subject and the nature of curriculum content: an analysis of liberal studies in Hong Kong, *Journal of Curriculum Studies*, 41 (5), 585 – 604.

Denscombe, M. (2010) *The good research guide: for small-scale social research projects*, Maidenhead: McGraw Hill.

Denzin, N. (1978) *Sociological Methods*, New York: McGraw-Hill.

Department for Education (DfE) (2013a) *National Teaching Schools*, <http://www.education.gov.uk/nationalcollege/index/support-for-schools/teachingschools.htm> retrieved 14/04/2013.

Department for Education (DfE) (2013b) *The English Baccalaureate*, <http://www.education.gov.uk/schools/teachingandlearning/qualifications/englishbac/a0075975/the-english-baccalaureate> retrieved 14/04/2013.

Department for Education (DfE) (2013c) *Twice as many students now taking academic subjects thanks to the EBacc*, <https://www.gov.uk/government/news/twice-as-many-students-now-taking-key-academic-subjects-thanks-to-the-ebacc> retrieved 14/04/2013.

Department for Education (DfE) (2015a) *Statistical first release - Schools, pupils and their characteristics: January 2015*, [https://www.gov.uk/government/uploads/system/uploads/attachment\\_data/file/433680/SFR16\\_2015\\_Main\\_Text.pdf](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/433680/SFR16_2015_Main_Text.pdf) retrieved 03/03/2017.

Department for Education (DfE) (2016a) *'Specialist and non-specialist' teaching in England: Extent and impact on pupil outcomes*, [https://www.gov.uk/government/uploads/system/uploads/attachment\\_data/file/578350/SubjectSpecialism\\_Report.pdf](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/578350/SubjectSpecialism_Report.pdf) retrieved 03/03/2017.

Department for Education (DfE) (2016b) *Academies annual report: 2014 to 2015*, [https://www.gov.uk/government/uploads/system/uploads/attachment\\_data/file/573234/Academies\\_annual\\_report\\_academic\\_year\\_2014-to-2015.pdf](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/573234/Academies_annual_report_academic_year_2014-to-2015.pdf) retrieved 03/03/2017.

Department for Education (DfE) (2016c) *Provisional GCSE and equivalent results in England, 2014 to 2015*, [https://www.gov.uk/government/uploads/system/uploads/attachment\\_data/file/467603/SFR37\\_2015.pdf](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/467603/SFR37_2015.pdf) retrieved 03/03/2017.

Disney, A. (2005) Children's images of a distant locality, *International Research in Geographical and Environmental Education*, 14 (4), 330 – 335.

Dorling, D. (2005) *Human geography of the UK*, London: SAGE.

Dorling, D. (2011) *Injustice: Why social inequality persists*, Bristol: Policy Press.

Dorling, D. (2012) *The no-nonsense guide to equality*, Oxford: New Internationalist.

Dorling, D., Newman, M. and Barford, A. (2008) *The Atlas of the real world: mapping the way we live*, London: Thames and Hudson.

Dorling, D. and Lee, C. (2016) *Geography: Ideas in profile*, London: Profile Books.

Dowgill, P. (1998) *Pupils' conceptions of learning geography under the National Curriculum*, Unpublished PhD thesis, Institute of Education, University of London.

Dretske, F. (2000) *Perception, knowledge, and belief*, Cambridge: Cambridge University Press.

Driver, F. (1992) Geography's empire: histories of geographical knowledge, *Environment and Planning D: Society and Space*, 10, 23 – 40.

Driver, R., Guesne, E. and Tiberghien, A. (1985) Children's ideas and the learning of science, in Driver, R., Guesne, E. and Tiberghien, A. (eds.) *Children's ideas in science*, Milton Keynes: Open University Press.

Duke of Edinburgh Award (2017) *The Duke of Edinburgh's Award*, <http://www.dofe.org/> retrieved 03/03/2017.

Dunne, M., Pryor, J. and Yates, P. (2005) *Becoming a Researcher: A Companion to the Research Process*, Maidenhead: Open University Press.

Durkheim, E. (1983) *Pragmatism and Sociology* (trans. Whitehouse, J. and Allcock, J.), Cambridge: Cambridge University Press.

Durkheim, E. (1995) *The Elementary Forms of Religious Life* (trans. Field, K.), New York: The Free Press.

Edmond, R. (2005) Ethnographic research methods with children and young people, in Greene, S. and Hogan, D. (eds.) *Researching Children's Experience: Approaches and Methods*, London: SAGE.

Edwards, J. (2004) *A nexus of relations of power in students as researchers approaches*, refereed paper for presentation at the Annual Conference of the Australian Association for Research in Education, Melbourne, 28<sup>th</sup> November – 2 December, 2004.

Edwards, J., Thomas, M., Rosenfeld, P. and Booth-Kewley, S. (1997) *How to conduct organizational surveys: A step-by-step guide*, Newbury Park, CA: SAGE.

Eisner, E. (2008) Persistent tensions in arts-based research, in Cahnmann-Taylor, M. and Siegesmund, R. (eds.) *Arts-based research in education: Foundations for practice*, New York: Routledge.

England, K. (1994) Getting personal: reflexivity, positionality and feminist research, *Professional Geographer*, 46, 80 – 9.

Epstein, T. (2007) The effects of family/community and school discourses on children's and adolescents' interpretations of United States history, *International Journal of Historical Learning, Teaching and Research*, 6 (1), 1 – 9.

Esman, M. (2004) *An Introduction to Ethnic Conflict*, Malden, MA: Blackwell.

Evans S. (1991) Good surveys guide, *British Medical Journal*, 302.

Fenton, S. (1999) *Ethnicity: Racism, Class and Culture*, London: Macmillan.

Ferretti, J. (2007) Education Matters: What influences students to choose geography at A level?, *Geography*, 92 (2), 137 – 147.

Figueroa, P. (2000) Researching education and racialization: virtue or validity?, in Simon, H. and Usher, R. (eds.) *Situated ethics in Educational Research*, London: Routledge Falmer.

Finley, S. (2008) Arts based inquiry: Performing revolutionising pedagogy, in Denzin, N. and Lincoln, Y. (eds.) *Collecting and interpreting qualitative materials*, Thousand Oaks, CA: SAGE.

Firth, R. (2011) Debates about knowledge and the curriculum: some implications for geography education, in Butt, G. (ed.) *Geography, Education and the Future*, London: Continuum.

Firth, R. (2013) What constitutes knowledge in geography?, in Lambert, D. and Jones, M. (eds.) *Debates in Geography Education*, Abingdon: Routledge.

Fisher, T. (1998) *Developing as a Teacher of Geography*, Cambridge: Chris Kington Publishing.

Flick, U. (2004) Triangulation: in qualitative research, in Flick, U., von Kardoff, E. and Steinke, I. (eds.) *A companion to qualitative research*, (trans. Jenner, B.), London: SAGE.

Flutter, J. (2007) Teacher development and student voice, *Curriculum Journal*, 18 (3), 343 – 354.

Foddy, W. (1994) *Constructing questions for interviews and questionnaires*, Cambridge: Cambridge University Press.

Foss, D. and Kleinsasser, R. (1996) Preservice elementary teachers' views of pedagogical and mathematical content knowledge, *Teacher and Teacher Education*, 12 (4), 429 – 442.

Foster, P., Gomm, R. and Hammersley, M. (1996) *Constructing educational inequality: An assessment of research on school processes*, London: Falmer.

Foucault, M. (1980) *Power / Knowledge: Selected Interview and Other Writings*, Brighton: Harvester Wheatsheaf.

Francis, B., Hutchings, M., Archer, L. and Melling, L. (2003) Subject choice and occupational aspirations among pupils at girls' schools, *Pedagogy, Culture and Society*, 11, 425 – 442.

Frost, R. (2007) Developing the skills of seven- and eight-year-old researchers: A whole class approach, *Educational Action Research*, 15 (3), 441 – 458.

Frost, R. (2008) Developing student participation, research and leadership: the HCD student partnership, *School Leadership and Management*, 28 (4), 353 – 368.

Frost, R. and Holden, G. (2008) Student voice and future schools: building partnerships for student participation, *Improving Schools*, 11 (1), 83 – 95.

Gardner, D. (2013) What is geography's place in post-14 education?, in Lambert, D. and Jones, M. (eds.) *Debates in Geography Education*, Abingdon: Routledge.

Gay, L. (1992) *Educational Research*, New York: Merrill.

GeoCapabilities (2016) *GeoCapabilities*, <http://www.geocapabilities.org/> retrieved 02/04/2017.

Geographical Association (2009a) *A different view: a manifesto from the Geographical Association*, Doncaster: Kingsbury Press.

Geographical Association (2009b) *A Different View: World issues survey*, <http://www.geography.org.uk/resources/adifferentview/worldissuesurvey/#top> retrieved 22/05/2017.

Geographical Association (2011a) *Geography Curriculum Consultation Full Report*, Sheffield: Geographical Association.

Geographical Association (2011b) *Action Plan for Geography*, <http://www.geography.org.uk/projects/actionplanforgeography/> retrieved 22/05/2017.

Geographical Association (2012) *National Curriculum Consultation*, <http://www.geography.org.uk/news/nationalcurriculumchanges/> retrieved 15/04/2013.

Geographical Association (2013a) *Curriculum Making*, <http://www.geography.org.uk/cpdevents/curriculummaking/> retrieved 24/04/2013.

Geographical Association (2013b) *Changes to the National Curriculum*, <http://www.geography.org.uk/news/nationalcurriculumchanges/> retrieved 12/04/2013.

Geographical Association (2016) *2016 examination results analysis*, <http://geography.org.uk/news/geography-gcse-and-a-level-exam-results> retrieved 23/05/2017.

Geographical Association (2017) *The specialist role of the GA*, <http://geography.org.uk/aboutus/about-us/> retrieved 22/05/2017.



Gerber, R. (1996) Interpretive Approaches to Geographical and Environmental Education Research, in Williams, M. (ed.) *Understanding geographical and environmental education*, London: Cassell.

Giles, J. and Middleton, T. (1999) *Studying Culture: A practical introduction*, Oxford: Blackwell.

Gillborn, D. (2008) Coincidence or conspiracy? Whiteness, policy and the persistence of the Black / White achievement gap, *Educational Review*, 60 (3), 229 – 248.

Gillborn, D. (2016) *Racism, education and the spiteful state: from 'passive tolerance' to active hostility?*, seminar at the Faculty of Education, University of Cambridge, 6<sup>th</sup> May 2016.

Gillborn, D. and Kirton, A. (2000) WHITE HEAT: racism, under-achievement and white-working class boys, *International Journal of Inclusive Education*, 4 (4), 271 – 288.

Gillborn, D. and Mirza, H. (2000) *Educational Inequality, Mapping Race, Class and Gender: a synthesis of research evidence*, London: Office for Standards in Education.

Gillham, B. (2007) *Real World Research: Developing a questionnaire*, London: Continuum.

Gilroy, P. (2000) *Against Race: Imagining Political Culture beyond the Color Line*, Cambridge, MA: Harvard University Press.

Glen, S. (2000) The dark side of purity or the virtues of double-mindedness?, in Simon, H. and Usher, R. (eds.) *Situated ethics in Educational Research*, London: Routledge Falmer.

Golafshani, N. (2003) Understanding reliability and validity in qualitative research, *The Qualitative Report*, 8 (4), 597 – 606.

Goldstein, B. (2007) All Photos Lie, in Stanczak, G. (ed.) *Visual Research Methods: Image, Society and representation*, London: SAGE.

Goodman, R. and Burton, D. (2012) What is the nature of the achievement gap, why does it persist and are government goals sufficient to create social justice in the education system?, *Education* 3 – 13, 40 (5), 500 – 514.

Goodson, I. (1981) Becoming an academic subject: patterns of explanation and evolution, *British Journal of Sociology of Education*, 2 (2), 163-180.

Goodson, I. (1993) *School Subjects and Curriculum Change*, London: Falmer

Gorard, S. (2001) *Quantitative Methods in Educational Research*, London: Continuum.

Gordon College (2013) *Gordon College of Education, Haifa, Israel*, <http://www.gordon.ac.il/pages/51.aspx> retrieved 22/02/2014.

Goswami, N., O'Donovan, M. and Yount, L. (2014) *Why race and gender still matter: An Intersectional approach*, London: Pickering and Chatto.

Gray, D. (2004) *Doing Research in the Real World*, London: SAGE.

Grbich, C. (2013) *Qualitative data analysis: an introduction*, London: SAGE.

Greene, S. and Hogan, D. (2005) *Researching Children's Experience: Methods and approaches*, London: SAGE.

Greevy, H., Knox, A., Nunney, F. and Pye, J. (2013) *Revised: The effects of the English Baccalaureate*, London: Department for Education.

Griffiths, M. (1998) *Educational Research for Social Justice: getting off the fence*, Buckingham: Open University Press.

Grimwade, K. (2007) *Presidential Lecture: The future of Geography*, at The Annual Conference of The Geographical Association, Derby, 12<sup>th</sup> – 14<sup>th</sup> April 2007.  
<http://www.geography.org.uk/cpdevents/annualconference/derby2007/> retrieved 27/05/2013.

Guijt, I. and Shah, M. (1998) Waking Up to Power, Conflict and Process, in Guijt, I and Shah, M. (eds.) *The Myth of Community Gender Issues in Participatory Development*, London: Intermediate Technology Publications.

Gutting, G. (2005) *Foucault: A very short introduction*, Oxford: Oxford University Press.

Haggett, P. (1995) *The Geographer's Art*, Oxford: Blackwell.

Hankivsky, O. (2014) *Intersectionality 101*,  
[https://www.sfu.ca/iirp/documents/resources/101\\_Final.pdf](https://www.sfu.ca/iirp/documents/resources/101_Final.pdf) retrieved 02/04/2017.

Hankivsky, O. and Grace, D. (2014) Understanding and emphasizing difference and intersectionality in mixed and multimethod research, in Hesse-Biber, S. and Burke Johnson, R. (eds.) *The Oxford Handbook of Mixed and Multimethod Research*, Oxford: Oxford University Press.

Hansen, K. and Jones, E. (2011) Ethnicity and gender gaps in early childhood, *British Educational Research Journal*, 36 (7), 973 – 991.

Harnad, S. (1991) *Back to the oral tradition: Through skywriting at the speed of thought*, <http://cogprints.org/3021/1/lyon.html> retrieved 02/04/2017.

Hart, R. (1997) *Children's participation, the theory and practice of involving young citizens in community development and environmental care*, London: Earthscan Publications

- Hart, R. (2008) Stepping back from 'the ladder': reflections on a model of participatory work with children, in Reid, A., Jensen, B., Nikel, J. and Simovska, V. (eds.) *Participation and Learning: Perspectives on Education and the Environment, Health and Sustainability*, Dordrecht: Springer.
- Hawkey, K. and Prior, J. (2011) History, memory cultures and meaning in the classroom, *Journal of Curriculum Studies*, 43 (2), 231 – 247.
- Healy, M. and Perry, C. (2000) Comprehensive criteria to judge validity and reliability of qualitative research within the realism paradigm, *Qualitative Market Research*, 3 (3), 118 – 126.
- HEFCE (2015) *Young participation in Higher Education: A levels and similar qualifications*, <http://www.hefce.ac.uk/pubs/year/2015/201503/> retrieved 02/04/2017.
- Hendley, D., Stables, S. and Stables, A. (1996) Pupils' subject preferences at Key Stage 3 in South Wales, *Educational Studies*, 22, 177 – 186.
- Hiebert, D. (1995) Ethnicity, in Johnston, R., Gregory, D. and Smith, M. (eds.) *The Dictionary of Human Geography*, Oxford: Blackwell.
- Holloway, S. and Valentine, G. (2000) (eds.) *Children's geographies – playing, living, learning*, London: Routledge.
- Holvino, E. (2010) Intersections: The Simultaneity of Race, Gender and Class, *Organization Studies, Gender, Work and Organization*, 17 (3), 248 – 277.
- Hopkins, P. (2010) *Young People, Place and Identity*, Abingdon: Routledge.
- Hopwood, N. (2004) Pupils' Conceptions of Geography: Towards an Improved Understanding, *International Research in Geographical and Environmental Education*, 13 (4), 348 – 361.

Hopwood, N. (2007) Environmental education: pupils' perspectives on classroom experience, *Environmental Education Research*, 13 (4), 453 – 465.

Hopwood, N. (2009) UK high school pupils' conceptions of geography: research findings and methodological implications, *International Research in Geographical and Environmental Education*, 18 (3), 185 – 197.

Hopwood, N. (2011) Young People's Conceptions of Geography and Education, in Butt, G. (ed.) *Geography, Education and the Future*, London: Continuum.

Hopwood, N. (2012) *Geography in Secondary Schools: Researching Pupils' Classroom Experiences*, London: Continuum.

Hopwood, N., Courtley-Green, C., and Chambers, T. (2005) Year 9 students' conceptions of geography, *Teaching Geography*, 30 (2), 91 – 93.

Horton, J. (2008) A 'sense of failure'? Everydayness and research ethics, *Children's Geographies*, 6 (4), 363 – 383.

Hudson, B. (1977) The new geography and the new imperialism: 1870 – 1918, *Antipode*, 9 (2), 12 – 19.

Hugly, P. and Sayward, C. (1987) Relativism and ontology, *The Philosophical Quarterly*, 37 (148), 279 – 290.

Hunting, G. (2014) *Intersectionality-informed qualitative research: A primer*, [https://www.sfu.ca/iirp/documents/resources/QualPrimer\\_FINAL\\_v3.pdf](https://www.sfu.ca/iirp/documents/resources/QualPrimer_FINAL_v3.pdf) retrieved 02/04/2017.

Hyett, N., Kenny, A. and Dickson-Swift, V. (2014) Methodology or Method? A critical review of qualitative case study reports, *International Journal of Qualitative Studies in Health and Well-being*, 9 (1), <http://www.tandfonline.com/doi/full/10.3402/qhw.v9.23606> retrieved 22/05/2017.

Hylton, K. (2012) Talk the talk, walk the walk: defining Critical Race Theory in research, *Race, Ethnicity and Education*, 15 (1), 23 – 41.

IGU-CGE (2015) *International Declaration on research in Geography Education*, <http://www.igu-cge.org/documents%202015/International%20Declaration%20on%20Research%20in%20Geography%20Education%20FULL%20DOCUMENT%20-%20JUNE%202015.pdf> retrieved 02/04/2017.

IGU-CGE (2016) *UK Commission for Geographical Education*, <https://igu-cgeuk.com/members/> retrieved 02/04/2017.

Jabeen, T. (2009) 'But I've never been asked!' Research with children in Pakistan, *Children's Geographies*, 7 (4), 405 – 419.

Jackson, P. (1987) *Race and Racism: Essays in social geography*, London: Unwin Hyman.

Jackson, P. (1995) Race, in Johnston, R., Gregory, D. and Smith, M. (eds.) *The Dictionary of Human Geography*, Oxford: Blackwell.

John, M. (2003) *Children's Rights and Power: Charging Up for a New Century*, London: Jessica Kinsley Publishers.

Johnson, S. (1987) Gender differences in science: parallels in interest, experience and performance, *International Journal of Science Education*, 9 (4), 467 – 481.

Johnston, R. (1995) Conflict, in Johnston, R., Gregory, D. and Smith, M. (eds.) *The Dictionary of Human Geography*, Oxford: Blackwell.

Johnston, R., Forrest, J. and Poulsen, M. (2002) The ethnic geography of EthniCities: The 'American model' and residential concentration in London, *Ethnicities*, 2 (2), 209 – 235.

Johnston, R., Poulsen, M. and Forrest, J. (2007) The Geography of Ethnic Residential Segregation: A Comparative Study of Five Countries, *Annals of the Association of American Geographers*, 97 (4), 713 – 138.

Joint Council for Qualifications (2013) *National GCSE results*  
[http://www.jcq.org.uk/national\\_results/gcses](http://www.jcq.org.uk/national_results/gcses) retrieved 18/04/2013.

Kelle, U. (1995) (ed.) *Computer-Aided Qualitative Data Analysis: Theory, Methods and Practice*, London: SAGE.

Kellett, M. (2005a) *Children as active researchers: a new research paradigm for the 21st century?*, ESRC, UK.

Kellett, M. (2005b) *How to Develop Children as Researchers: a step by step guide to teaching the research process*, London: SAGE.

Kellett, M. (2010) *Rethinking children and research: attitudes in contemporary society*, London: Continuum.

Kelly, A. (1988) Option Choice for Girls and Boys, *Research in Science and Technological Education*, 6 (1), 5 – 23.

Kemmis, S. (2001) Exploring the relevance of critical theory for action research: Emancipatory action research in the footsteps of Jürgen Habermas, in Reason, P. and Bradbury, H. (eds.) *Handbook of action research: Participative inquiry and practice*, London: SAGE.

Kemmis, S. and McTaggart, R. (2005) Participatory action research: communicative action and the public sphere, in Denzin, N. and Lincoln, Y. (eds.) *The Sage Handbook of Qualitative Research*, Thousand Oaks, CA: SAGE.

Kesby, M., Kindon, S. and Pain, R. (2005) Participatory research, in Flowerdew, R. and Martin, M. (eds.) *Methods in Human Geography*, London: Pearson.

Kinder, A. (2013) *Bringing knowledge back in*, discussion forum at The Annual Conference of The Geographical Association, Derby, 4 – 6<sup>th</sup> April 2013.

Kinder, A. and Lambert, D. (2011) The National Curriculum Review: what geography should we teach?, *Teaching Geography*, 36 (3), 93 – 95.

Kitchen, R. (2011) *What is geography?: How do Year 7 perceptions of geography change as a result of teaching?*, Unpublished MA thesis, School of Education, Oxford Brookes University.

Kitchen, R. (2013a) What is geography? The view from Year 7, *Teaching Geography*, 38 (1), 17 – 19.

Kitchen, R. (2013b) Student perceptions of geographical knowledge and the role of the teacher, *Geography*, 8 (3), 112 – 122.

Kitchen, R. (2016) Whose stone is it anyway? Articulating the impact of exploratory doctoral research for professional educators, in Burnard, P., Dragovic, T., Flutter, J. and Alderton, J. (eds.) *Transformative Doctoral Research Practices for Professionals*, Rotterdam: SensePublishers.

Kitchen, R. (2017) *Teaching Critical Thinking and Problem Solving in GCSE and A level Geography*, British Council Connecting Classrooms, CPD materials.

Kivisto, P. and Croll, P. (2012) *Race and Ethnicity: the basics*, Oxford: Routledge.

Kobayashi, A. (1994) Coloring the field: Gender, 'Race' and the Politics of Fieldwork, *The Professional Geographer*, 46 (1), 73 – 80.

Kobayashi, A. and Peake, L. (1994) Unnatural Discourse: 'Race' and gender in geography, *Gender, Place and Culture*, 1 (2), 225 – 243.



Konstantoni, K., Kustatscher, M., Emejulu, A. and Sime. D. (2014) *Intersectional Childhoods and Inequalities*, Seminar Series Briefing Paper, Edinburgh, Scottish Universities Insight Institute, University of Edinburgh.

Kvale, S. (1996) *Interviews: An introduction to qualitative research interviewing*, Thousand Oaks, CA: SAGE.

Kvasny, L., Trauth, E. and Morgan, A. (2009) Power relations in IT education and work: the intersectionality of gender, race and class, *Journal of Information Communication and Ethics in Society*, 7 (2), 96 – 118.

Kyambi, S., Sriskandarajah, D. and Miles, N. (2007) *Diverse futures, equal chances: funding ethnic minority achievement in education*, England: Association of Teachers and Lecturers.

Lam, C. and Lai, E. (2003) 'What is Geography?' in the eyes of junior secondary students in Hong Kong, *International Research in Geographical and Environmental Education*, 12 (3), 199 – 218.

Lambert, D. (2010) Geography education research and why it matters, *International Research in Geographical and Environmental Education*, 19 (2), 83 – 86.

Lambert, D. (2011) Reviewing the case for geography and the 'knowledge turn' in the English national curriculum, *The Curriculum Journal*, 22 (3), 243 – 264.

Lambert, D. (2013a) *Progress(ion) in Geography*, lecture presented at The Annual Conference of The Geographical Association, Derby, 4 – 6<sup>th</sup> April 2013.

Lambert, D. (2014a) Interculturalism, a sense of the global and a capabilities approach to curriculum making, *Teaching Geography*, 39 (3), 106 – 107.

Lambert, D. (2014b) Curriculum thinking, 'capabilities' and the place of geographical knowledge in schools, *Journal of Educational Research on Social Studies*, 81, 1 – 11.

Lambert, D. (2015) Research in Geography Education, in Butt, G. (ed.) *Masterclass in Geography Education*, London: Bloomsbury.

Lambert, D., Solem, M. and Tani, S. (2015) Achieving human potential through geographical education, a capabilities approach to curriculum making in schools, *Annals of the Association of American Geographers*, 105 (4), 723 – 735.

Slater, F., Graves, N. and Lambert, D. (2016) Geography and Powerful Knowledge, *International Research in Geographical and Environmental Education*, 25 (3), 1 – 6.

Lancy, D. (1993) *Qualitative Research in Education*, New York: Longman.

Layton, D. (1972) *Science as general education: Trends in Education*, London: HMSO.

Lawrie, L. and Brown, R. (1992) Sex stereotypes, school subject preferences and career aspirations as a function of single / mixed sex schooling and presence / absence of an opposite sex sibling, *British Journal of Educational Psychology*, 62, 132 – 138.

LeCompte, M. and Preissle, J. (1993) *Ethnography and qualitative design in educational research*, San Diego, CA: Academic Press.

Lewis, A. and Porter, J. (2007) Research and pupil voice, in Florian, L. (ed.) *Handbook of Special Education*, London: SAGE.

Lightbody, P., Siann, G., Stocks, R. and Walsh, D. (1996) Motivation and attribution at secondary school: the role of gender, *Educational Studies*, 22 (1), 13 – 25.

Lincoln, Y. and Guba, E. (1985) *Naturalistic inquiry*, Beverly Hills, CA: SAGE.

Livingstone, D. (1992) *The Geographical Tradition*, Oxford: Blackwell.

Lord, P. and Jones, M. (2006) *Pupil's experiences and perspectives of the National curriculum and assessment: final report for the research review*, Slough: NFER.

Lunn, S. (2002) What we think we can safely say...: primary teachers' views on the nature of science, *British Educational Research Journal*, 28 (5), 649 – 672.

Luther, A. (2000) The 'old' method of teaching vs the 'new' method of teaching, *Journal of Thought*, 35 (2), 59 – 69.

Luzzadder-Beach, S. and Macfarlane, A. (2000) The environment of gender and science: status and perspectives of women and men in physical geography, *Professional Geographer*, 52, 407 – 424.

Mansell, J. and Robertson, E. (2001) *Analysis of the 2001 examination results and the position of geography*, <https://www.rgs.org/NR/rdonlyres/A4A31B19-1A9A-44FE-A40B-D7101F7685FA/0/Analysis2001.pdf> retrieved 02/04/2017.

Martin, F. (1999) Contrasting views on locality between child and adult, *International Research in Geographical and Environmental Education*, 8 (1), 78 – 81.

Martin, F. (2000) Postgraduate primary education students' images of geography and the relationship between these and students' teaching, *International Research in Geographical and Environmental Education*, 9 (3), 223 – 244.

Martin, M. (2005) Ethnogeography: A Future for Primary Geography and Primary Geography Research?, *International Research in Geographical and Environmental Education*, 14 (4), 364 – 371.

Martin, F. (2006) *Ethnogeography: A future for primary geography?*, GTE conference presentation, Brighton.

Martin, F. (2008) Ethnogeography: towards liberatory geography education, *Children's Geographies*, 6 (4), 437 – 450.

Martin, F. (2012) The geographies of difference, *Geography*, 97 (3), 116 – 122.

Maton, K. (2003) Reflexivity, relationism and research: Pierre Bourdieu and the epistemic conditions of social scientific knowledge, *Space and Culture*, 6 (1), 52 – 65.

May, S. (2005) (ed.) *Critical multiculturalism: rethinking multicultural and antiracist education*, London: Falmer.

Mayaba, N. and Wood, L. (2015) Using Drawings and Collages as Data Generation Methods with Children: Definitely Not Child's Play, *International Journal of Qualitative Methods*, 14, 1 – 10.

Maynard, M. (1994) Methods, practice and epistemology: The debate about feminism and research, in Maynard, M. and Purvis, J., *Researching Women's Lives from a Feminist Perspective*, London: Taylor and Francis.

McCall, L. (2005) The Complexity of Intersectionality, *Journal of Women in Culture and Society*, 30 (3), 1771 – 1800.

McCrone, T., Morris, M. and Walker, M. (2005) *Pupil choices at Key Stage 3: Literature Review*,  
[www.education.gov.uk/publications/eOrderingDownload/RW68.pdf](http://www.education.gov.uk/publications/eOrderingDownload/RW68.pdf) retrieved 02/04/2017.

McCulloch, A. (2014a) *Regional differences in University admissions in England*  
[www.hecsu.ac.uk/assets/assets/documents/GMT\\_winter\\_2014.pdf](http://www.hecsu.ac.uk/assets/assets/documents/GMT_winter_2014.pdf) retrieved 14/03/2014.

McCulloch, A. (2014b) *University admissions in London*  
<http://amccul39.wordpress.com/?blogsub=confirming#subscribe-blog> retrieved 14/03/2014.

McIntyre, D., Pedder, D., and Rudduck, J. (2005) Pupil voice: comfortable and uncomfortable learnings for teachers, *Research Papers in Education*, 20 (2), 149 – 168.

McKeever, M. (2000) Snakes and ladders: ethical issues in conducting educational research in a postcolonial context, in Simon, H. and Usher, R. (eds.) *Situated ethics in Educational Research*, London: Routledge Falmer.

McNee, R. (1967) The structure of geography, in Association of American Geographers (eds.) *New approaches in introductory college geography courses*, Washington, DC: Association of American Geographers.

McWhorter, L. (2005) Where do white people come from? A Foucaultian critique of Whiteness Studies, *Philosophy Social Criticism*, 31 (5 – 6), 533 – 566.

Miles, M., Huberman, A. and Saldāna, J. (2014) *Qualitative data analysis: a methods sourcebook*, London: SAGE.

Mills, C. (1998) *Blackness visible: Essays on philosophy and race*, Ithaca: Cornell University Press.

Mirza, M. (1995) Some Ethical Dilemmas in Field Work: Feminist and Antiracist Methodologies, in Griffiths, M. and Troyna, B. (eds.) *Antiracism, Culture and Social Justice in Education*, Stoke-on-Trent: Trentham.

Mitchell, W. (1994) *Picture theory: essays on verbal and visual representation*, Chicago: University of Chicago Press.

Mitchell, C., Theron, M., Stuart, J., Smith, A. and Campbell, Z. (2011) Drawings as research method in Theron, M., Mitchell, C., Smith, A. and Stuart, J. (eds.) *Picturing Research: Drawings as visual methodology*, Dordrecht: Springer

Moore, R. (2007) *Sociology of Knowledge and Education*, London: Continuum.

Morgan, J. (2002) Teaching Geography for a better world? The postmodern challenge and Geography education, *International Research in Geographical and Environmental Education*, 11 (1), 15 – 29.

Morgan, M., Gibbs, S., Maxwell, K. and Britten, N. (2002) Hearing children's voices: methodological issues in conducting focus groups with children aged 7-11 years, *Qualitative Research*, 2 (5), 5 – 20.

Morgan, J. and Lambert, D. (2003) *Theory into Practice: Place, 'Race' and Teaching Geography*, Sheffield: Geographical Association.

Morgan, J. and Lambert, D. (2005) *Geography: Teaching school subjects 11 – 19*, Abingdon: Routledge.

Morgan, J. and Lambert, D. (2011) Editor's introduction, *The Curriculum Journal*, 22 (3), 279 – 287.

Morley, E. (2012) English primary trainee teachers' perceptions of geography, *International Research in Geographical and Environmental Education*, 21 (2), 123 – 137.

Morrison, K. (1993) *Planning and Accomplishing School-centred Evaluation*, Norfolk: Peter Francis.

Morrison, M. (2007) What do we mean by education research?, in Briggs, A. and Coleman, M. (eds.) *Research Methods in Educational Leadership and Management*, London: SAGE.

Munn, P. and Drever, E. (1990) *Using Questionnaires in Small-Scale Research, A Teacher's Guide*, Edinburgh: Scottish Council for Research in Education.

NALDIC (2015) *Do schools get extra money to support EAL learners?*,  
[https://www.naldic.org.uk/eal-teaching-and-learning/faqs/doschoolsget\\_extra\\_moneyto\\_support\\_eal\\_learners/](https://www.naldic.org.uk/eal-teaching-and-learning/faqs/doschoolsget_extra_moneyto_support_eal_learners/) retrieved 22/05/2017.

Navarro, Z. (2006) *In Search of Cultural Intepretation of Power*, IDS Bulletin, 37 (6), 11 – 22.

Neilsen, L. (2002) Learning from the luminal: Fiction as knowledge, *Alberta Journal of Educational Research*, 47, 206 – 214.

New Schools Network (2016) *Glass ceilings: Access to A levels in England*,  
<http://www.newschoolsnetwork.org/sites/default/files/NSN%20Data%20Briefing%20-%20Glass%20Ceilings%20final.pdf> retrieved 22/05/2017.

Nisbet, J. and Watt, J. (1984) Case Study, in Bell, J., Bush, T., Fox, A., Goodey, J. and Goulding, S. (eds.), *Conducting Small-Scale Investigations in Educational Management*, London: Harper and Row

Niven, K. (2012) *Students' perceptions of geography at Key Stage 3 and implications for options at GCSE: a case study in a rural village college*, presentation at The Annual Conference of the Geographical Association conference, Manchester.

Norman, M. and Harrison, L. (2004) Year 9 students' perceptions of school geography, *Teaching Geography*, 29 (1), 11 – 15.

Northam, J. (1982) Girls and boys in primary maths books, *Education*, 10 (1), 11 – 14.

Noyes, A. (2005) Pupil voice: purpose, power and the possibilities for democratic schooling, *British Educational Research Journal*, 31 (4), 533 – 540.

OED (2017) *definitions of 'child' and 'participant'*,  
<https://en.oxforddictionaries.com/definition/> retrieved 22/05/2017.

Office for National Stats (2003) *Ethnic Group*,  
<http://webarchive.nationalarchives.gov.uk/20160105160709/http://www.ons.gov.uk/ons/guide-method/measuring-equality/equality/ethnic-nat-identity-religion/ethnic-group/index.html> retrieved 22/05/2017.

Office for National Statistics (2012) *Ethnicity and Identity in England and Wales 2011*, <http://www.ons.gov.uk/ons/rel/census/2011-census/key-statistics-for-local-authorities-in-england-and-wales/rpt-ethnicity.html> retrieved 22/02/2014.

Office for National Statistics (2013) *2011 Census: Ethnic group, local authorities in England and Wales*, <https://www.ons.gov.uk> retrieved 21/05/2017.

Office for National Statistics (2015) *Divorces in England and Wales: 2014*,  
<https://www.ons.gov.uk/peoplepopulationandcommunity/birthsdeathsandmarriages/divorce/bulletins/divorcesinenglandandwales/2014> retrieved 02/04/2017.

Ofqual (2013) *Ofqual*, <http://ofqual.gov.uk/> retrieved 22/02/2014.

Ogden, P. (1995) Assimilation, in Johnston, R., Gregory, D. and Smith, M. (eds.) *The Dictionary of Human Geography*, Oxford: Blackwell.

Ogden, R. (2008) Anonymity, in Given, L. (ed.) *The SAGE encyclopedia of qualitative research methods*, London: SAGE.

Oliver, M. (1997) Emancipatory Research: Realistic Goal or Impossible Dream?' in Barnes, C. and Mercer, G. (eds.) *Doing Disability Research*, Leeds: The Disability Press.

Oliver, P. (2003) *A students' guide to research ethics*, Maidenhead: Open University Press.

Olzak, S. (1992) *The dynamics of ethnic competition and conflict*, Stanford, CA: Stanford University Press.



Omi, M. and Winant, H. (1994) *Racial formation in the United States: From the 1960s to the 1990s*, New York: Routledge.

Onwuegbuzie, A. and Leech, N. (2006) Linking research questions to mixed methods data analysis procedures, *The Qualitative Report*, 11, 474 – 498.

Oppenheim, A. (1992) *Questionnaire design, interviewing and attitude measurement*, London: Pinter Publishers Ltd.

Palin, M. (2011) *Michael Palin: geography students hold the key to the world's problems*, <https://www.theguardian.com/education/2011/aug/18/geography-top-10-a-level-subjects> retrieved 02/04/2017.

Parker, L. and Lynn, M. (2002) What's Race got to do with it? Critical Race Theory's conflicts with and connections to qualitative research methodology and epistemology, *Qualitative Inquiry*, 8 (1), 7 – 22.

Paton, G. (2013) *Children sitting too many GCSEs, exam board boss says*, <http://www.telegraph.co.uk/education/educationnews/10478876/Children-sitting-too-many-GCSEs-exam-board-boss-says.html> retrieved 02/04/2017.

Patterson, O. (1997) *The Ordeal of Integration: Progress and resentment in America's 'Racial' crisis*, Washington, DC: Civitas / Counterpoint.

Pattinson, W. (1964) The four traditions of geography, *Journal of Geography*, 63 (5), 211 – 216.

Peach, C. (1996) Does Britain have ghettos? *Transactions of the Institute of British Geographers*, 21, 216 – 235.

Phoenix, A. (2006) Editorial: Intersectionality, *European Journal of Women's Studies*, 13 (3), 187 – 192.

Pike, S. (2006) Irish school children definitions of geography, *Irish Educational Studies*, 25 (1), 75 – 92.

Plaut, S. (2014) The myth of ethnic inequality in Israel, *The Middle East Quarterly*, <http://www.meforum.org/3839/israel-inequality> retrieved 22/05/2017.

Pond, J. (2011) *Women's history: Three waves of feminism*, <https://www.slideshare.net/JamiePond/threewaves-6791082> retrieved 22/05/2017.

Pratt, J., Bloomfield, J. and Seale, C. (1984) *Option Choice: A question of equal opportunity*, Windsor: NFER-Nelson.

Preston, J. (2010) Concrete and abstract racial domination, *Power and Education*, 2 (2), 115 – 125.

Pring, R., Hayward, G., Hodgson, A., Johnson, J., Keep, E., Oancea, A., Rees, G., Spours, K. and Wilde, S. (2009) *Education for All: The future of education and training for 14 - 19 year olds*, London: Routledge.

Pryor, J. (2010) Constructing Research questions: focus, methodology and theorisation, in, Thomson, P. and Walker, M. (eds.) *The Routledge Doctoral Student's Companion: Getting to Grips with Research in Education and the Social Sciences*, Oxford: Routledge.

Pryor, J. and Ampiah, J. (2004) Listening to Voices in the Village: Collaborating through Data Chains, in Mutua, K. and Swadener, B., *Declonising Research in Cross Cultural Research: Critical Personal Narratives*, Albany: State University of New York Press.

Pulido, L. (2002) Reflections on a White Discipline, *The Professional Geographer*, 54 (1), 42 – 49.

Punch, S. (2002) Research with children: the same or different from research with adults?, *Childhood*, 9 (3), 321 – 341.

Punch, K. (2003) *Survey research: the basics*, London: SAGE.

QCDA (2007) *The National Curriculum Big Picture*, This asset has been removed from the QCDA website but can be accessed at <http://www.teachfind.com/qcda/big-picture-secondary-curriculum> retrieved 23/02/2014.

Qualter, A. (1993) I would like to know more about that: a study of the interest shown by girls and boys in scientific topics, *International Journal of Science Education*, 20 (3), 307 – 317.

RAISEOnline (2013) *RAISEOnline*  
<https://www.raiseonline.org/login.aspx?ReturnUrl=%2f> retrieved 23/02/2014.

Ravet, J. (2007) Enabling pupil participation in a study of perceptions of disengagement: methodological matters, *British Journal of Special Education*, 34, 234 – 242.

Rawding, C. (2010) What are the connections between subject developments in academic and school geography?, *International Research in Geography and Environmental Education*, 19 (2), 119 – 125.

Rawding, C. (2013) *Effective innovation in the secondary geography curriculum*, Abingdon: Routledge.

Rawling, E. (2001) *Changing the Subject: The impact of National Policy on School Geography 1980 – 2000*, Sheffield: Geographical Association.

Rawling, E. (2016) The geography curriculum 5 – 19: what does it all mean?, *Teaching Geography*, 41 (1), 6 – 9.

Rayment, T. (2000) Art teachers' views of National Curriculum Art: a repertory grid analysis, *Educational Studies*, 26 (2), 165 – 176.

Reason, P. and Bradbury, H. (2001) Introduction to practices, in Reason, P. and Bradbury, H. (eds.) *The SAGE handbook of Action Research: Participative inquiry and practice*, London: SAGE.

Reid, M., Barnett, B. and Rosenberg, H. (1974) *A Matter of Choice. A Study of Guidance and Subject Options*, Windsor: NFER.

Richardson, L. (1997) *Fields of play, constructing an academic life*, New Brunswick, NJ: Rutgers University Press.

Rickinson, M. (1999) People-environment Issues in the Geography Classroom: Towards an Understanding of Students' Experiences, *International Research in Geographical and Environmental Education*, 8 (2), 120 – 139.

Ridenour, C. and Newman, I. (2008) *Mixed Methods Research: Exploring the Interactive Continuum*, Carbondale, IL: Southern Illinois University Press.

Roberts, M. (2009a) Investigating Geography, *Geography*, 94 (3), 181 – 188.

Roberts, M. (2009b) GTIP *orientation piece – research*,  
<http://www.geography.org.uk/gtip/orientationpieces/research/> retrieved 21/01/2016.

Roberts, M. (2010) Geographical enquiry, *Teaching Geography*, 35 (1), 6 – 9.

Roberts, M. (2011) *What makes a geography lesson good?*,  
[www.geography.org.uk/download/GA\\_PRMGHWhatMakesAGeographyLessonGood.pdf](http://www.geography.org.uk/download/GA_PRMGHWhatMakesAGeographyLessonGood.pdf) retrieved 02/04/2017.

Roberts, M. (2013) *Powerful Knowledge: to what extent is this idea applicable to school geography?*, lecture and discussion forum at The Institute of Education, London, 15<sup>th</sup> May 2013.

Roberts, M. (2017) Geography education is powerful if..., *Teaching Geography*, 42 (1), 6 – 9.

Robinson, J. (1976) A new look at the four traditions of geography, *The Journal of Geography*, 75 (9), 520 – 530.

Robson, C. (2002) *Real World Research: A Resource for Social Scientists and Practitioner Researchers*, Oxford: Blackwell.

Rose, G. (2007) *Visual Methodologies: An Introduction to the Interpretation of Visual Images*, London: SAGE.

Royal Geographical Society (2011) *Call for evidence: Higher Education in STEM subjects*, [http://www.rgs.org/NR/rdonlyres/B8F3EEF5-F1D7-48C1-82D6-E64FCD571598/0/2011\\_HE\\_STEM.pdf](http://www.rgs.org/NR/rdonlyres/B8F3EEF5-F1D7-48C1-82D6-E64FCD571598/0/2011_HE_STEM.pdf). retrieved 23/05/2017.

Royal Geographical Society (2012) *Higher Education in STEM subjects: call for evidence*, <http://www.rgs.org/NR/rdonlyres/D631E559-861D-4C24-B94E-96C15BBBE9DD/0/111215HigherEducationinSTEMresponsefromtheRoyalGeographicalSociety.pdf> retrieved 11/01/2013.

Royal Geographical Society (2013) *Geography A level, AS level and GCSE entries and results 2012*, <http://www.rgs.org/NR/rdonlyres/27F2EB6D-B5D5-426A-9701-2F87FBD43D15/0/AlevelASandGCSEResults2012.pdf> retrieved 14/04/2013.

Royal Geographical Society (2016) *21st century challenges*, <https://21stcenturychallenges.org/> retrieved 03/04/2017.

Russell Group (2016) *Russell Group*, <http://russellgroup.ac.uk/> retrieved 03/04/2017.

Runnymede Trust (2012) *Briefing on ethnicity and educational attainment, June 2012* <https://www.runnymedetrust.org/uploads/Parliamentary%20briefings/EducationWhitePaperJune2012.pdf> retrieved 14/03/2014.

Rutherford, D. (2002) Building empirically-based theory in geography education, *International Research in Geographical and Environmental Education*, 11 (3), 283 – 286.

Ryan, T. (2004) Reflexivity and the reader: an illumination, *The Ontario Action Researcher*, 7 (1), [oar.nipissingu.ca/PDFS/V712.pdf](http://oar.nipissingu.ca/PDFS/V712.pdf) retrieved 03/04/2017.

Ryrie, A., Furst, A. and Lauder, M. (1979) *Choices and Chances: A study of pupils' subject choices and future career intentions*, London: Hodder and Stoughton.

Saldaña, J. (2013) *The coding manual for qualitative researchers*, London: SAGE.

Sandelowski, M. (2010) What's in a name? Qualitative description revisited, *Research in Nursing and Health*, 33 (1), 77 – 84.

Sapsford, R. (2007) *Survey Research*, London: SAGE.

Schafer, N. (2012) Finding ways to do research on, with and for children and young people, *Geography*, 97 (3), 147 – 154.

Schurr C. and Segebart D. (2012) Engaging with feminist postcolonial concerns through participatory action research and intersectionality, *Geographica*, 67, 147–154.

Scott, D. (2008) *Critical essays on major curriculum theorists*, London: Routledge.

Seedhouse, D. (1998) *Ethical grid*, [www.priory.com/images/ethicgrid.JPG](http://www.priory.com/images/ethicgrid.JPG) retrieved 18/04/2013.

Seidman, I. (2006) *Interviewing as qualitative research: A guide for researchers in education and the social sciences*, New York: Teachers College Press.

Sheldon, N. (2011) *The National Curriculum and the changing face of school history, 1988 – 2010*, [https://www.history.ac.uk/history-in-education/sites/history-in-education/files/attachments/a\\_history\\_of\\_school\\_history\\_1988-2010.doc](https://www.history.ac.uk/history-in-education/sites/history-in-education/files/attachments/a_history_of_school_history_1988-2010.doc) retrieved 03/04/2017.

Shih, M., Bonam, C., Sanchez, D. and Peck, C. (2007) The social construction of race: Biracial identity and vulnerability to stereotypes, *Cultural Diversity and Ethnic Minority Psychology*, 13 (2), 125 – 133.

Short, G. and Carrington, B. (1996) Anti-racist education, multiculturalism and the new racism, *Educational Review*, 48 (1), 65 – 77.

Shulman, L. (1986) Those who understand: knowledge growth in teaching, *Educational Researcher*, 15 (2), 4 – 14.

Sidaway, J. and Johnston, R. (2007) Geography in Higher Education in the UK, *Journal of Geography in Higher Education*, 31 (1), 57 – 80.

Silverman, D. (1985) *Qualitative Methodology and Sociology: Describing the Social World*, Aldershot: Gower.

Simons, H. (2009) *Case study research in practice*, London: SAGE.

Simons, H. and Usher, R. (2000) *Situated ethics in Educational Research*, London: Routledge Falmer.

Simpson, J. (2009) *Everyone belongs: A toolkit for applying intersectionality*, [www.criaw-icref.ca/sites/criaw/files/Everyone\\_Belongs\\_e.pdf](http://www.criaw-icref.ca/sites/criaw/files/Everyone_Belongs_e.pdf) retrieved 03/04/2017.

Singleton, A. (2012) The geodemographics of access and participation in Geography, *The Geographical Journal*, 178 (3), 216 – 229.

Smedley, A. and Smedley, B. (2005) Race as biology is fiction, racism as a social problem is real: Anthropological and historical perspectives on the social construction of race, *American Psychologist*, 60 (1), 16 – 26.

Smith, A. (2002) *The problem of perception*, Cambridge: Harvard University Press.

Sparke, M. (1996) Displacing the Field in Fieldwork: Masculinity, Metaphor and Space, in Duncan, N. (ed.) *BodySpace: Destabilizing Geographies of Gender and Sexuality*, New York: Routledge.

Squires, G. and Kubrin, C. (2005) Privileged Places: Race, Uneven Development and the Geography of Opportunity in Urban America, *Urban Studies*, 42 (1), 47 – 68.

Stables, A. (1990) Differences between Pupils from Mixed and Single-Sex Schools in their Enjoyment of School Subjects and in their Attitudes to Science and to School, *Educational Review*, 42 (3), 221 – 230.

Stables, A. (1996) *Subjects of Choice. The Process and Management of Pupil and Student Choice*, London: Cassell.

Stables, A. and Stables, S. (1995). Gender differences in students' approaches to A-level subject choices and perceptions of A-level subjects: a study of first-year A-level students in a tertiary college, *Educational Research*, 37 (1), 39 – 51.

Stables, A. and Wikeley, F. (1997) Changes in preference for and perceptions of relative importance of subjects during a period of educational reform, *Educational Studies*, 23 (3), 393 – 403.

Stahl, G. (2012) Aspiration and a good life among white working-class boys in London, *Journal of Qualitative and Ethnographic Research*, 7 (8–9), 8 – 19.

Stahl, G. (2013) Habitus Disjunctures, Reflexivity and White Working-Class Boys' Conceptions of Status in Learner and Social Identities, *Sociological Research Online*, 18 (3), 2.



- Stahl, G. (2015) *Identity, neoliberalism and aspiration: educating White working-class boys*, Abingdon: Routledge.
- Stake, R. (1995) *The art of case study research*, Thousand Oaks, CA: SAGE.
- Stake, R. (2003). Case Studies, in Denzin, N. and Lincoln, Y. (eds.) *Strategies of Qualitative Inquiry*, London: SAGE.
- Stake, R. (2005) Qualitative case studies, in Denzin N. and Lincoln Y. (eds.) *The SAGE handbook of qualitative research*, Thousand Oaks, CA: SAGE.
- Stannard, K. (2002) Waving, not Drowning: Geography Challenges and Opportunities, *Geography*, 87 (1), 73 – 83.
- Stanfield, J. (1993) *Race and ethnicity in research methods*, London: SAGE.
- Stanczak, C. (2007) *Visual Research Methods. Images, Society and Representation*, California: SAGE.
- Stanworth M. (1981) *Gender and Schooling: a study of sexual division in the classroom*, London: Hutchinson.
- Stenbacka, C. (2001) Qualitative research requires quality concepts of its own, *Management Decision*, 39 (7), 551 – 555.
- Stevens, P. (2007) Researching race / ethnicity and educational inequality in English Secondary Schools: A critical review of the research literature between 1980 and 2005, *Review of Educational Research*, 77 (2), 147 – 185.
- Stodolsky, S. and Grossman, P (1995) The impact of subject matter on curricular activity: an analysis of five academic subjects, *American Educational Research Journal*, 32 (2), 227 – 249.

Stott, T., Howard, R. and Linnett, R. (1997) What influences students' choice of geography at GCSE?, *Teaching Geography*, 22 (4), 192 – 193.

Straker, N. (1989) The position of maths as an A level subject, *Mathematical Education for Teaching*, 5, 44 – 51.

Strand, S. (2008) Educational aspirations in inner city schools, *Educational Studies*, 34 (4), 249 – 267.

Strike, K. (1990) The ethics of educational evaluation in Millman, J. and Darling-Hammond, L. (eds.) *The new handbook of teacher evaluation*, London: SAGE.

Stutchbury, K. and Fox, A. (2009) Ethics in Educational Research: Introducing a methodological tool for effective ethical analysis, *Cambridge Journal of Education*, 39 (4), 489 – 504.

Su, F., Nixon, J and Adamson, B. (2010) Seeking the single thread: The conceptual quest, in Thomson, P. and Walker, M. (eds.) *The Routledge Doctoral Student's Companion: Getting to Grips with Research in Education and the Social Sciences*, Oxford: Routledge.

Sudman, S. and Bradburn, N. (1982) *Asking Questions: A practical guide to questionnaire design*, San Francisco: Jossey-Bass.

Taber, K. (2013) Conceptual frameworks, metaphysical commitments and worldviews: the challenge of reflecting the relationships between science and religion in science education, in Mansour, N. and Wegerif, R. (eds.), *Science Education for Diversity: Theory and practice*, Dordrecht: Springer.

Tay-Lim J. and Lim S. (2013) Privileging younger children's voices in research: Use of drawings and a co-construction process, *International Journal of Qualitative Methods*, 12, 66 – 83.

Taylor, A. (2007) Learning to become researching professionals: The case of the doctorate of education, *International Journal of Teaching and Learning in Higher Education*, 19 (2), 154 – 166.

Taylor, L. (2009) Children constructing Japan: material practices and relational learning, *Children's Geographies*, 7 (2), 173 – 189.

Taylor, L. (2011) Investigating change in young people's understandings of Japan: A study of learning about a distant place, *British Educational Research Journal*, 37 (6), 1033 – 1054.

Taylor, L. (2016) Case study methodology, in Clifford, N., Cope, M., Gillespie, T. and French, S. (eds.) *Key methods in Geography*, London: SAGE.

Taylor, P. and Medina, M. (2013). Educational research paradigms: From positivism to multiparadigmatic, *Meaning Centered Education*, 1, <http://www.meaningcentered.org/educational-research-paradigms-from-positivism-to-multiparadigmatic/> retrieved 23/05/2017.

The Telegraph (2014) *Nicky Morgan: pupils 'held back' by overemphasis on the arts*, <http://www.telegraph.co.uk/education/educationnews/11221081/Nicky-Morgan-pupils-held-back-by-overemphasis-on-arts.html> retrieved 23/05/2017.

The Telegraph (2016) *GCSE school league tables 2015: compare your school's performance*, <http://www.telegraph.co.uk/education/2016/03/28/gcse-school-league-tables-2015-compare-your-schools-performance/> retrieved 03/04/2017.

Thomas, G. (2009) *How to do your research project*, London: SAGE.

Thomas, G. (2016) *How to do your case study*, London: SAGE.

Thomson, P. (2016) *An ethics of analysis and writing*, <https://patthomson.net/2016/12/12/an-ethics-of-analysis-and-writing/> retrieved 23/05/2017.

Thomson, P. (2008) *Doing Visual Research with Children and Young People*, New York: Routledge.

Tikly, L., Osler, A. and Hill, J. (2005) The ethnic minority achievement grant: a critical analysis, *Journal of Education Policy*, 20 (3), 283 – 312.

Tilbury, D. & Walford, R. (1996), Grounded Theory: Defying the Dominant Paradigm, in Williams, M. (ed.) *Environmental Education Research: Understanding Geographical and Environmental Education: The Role of Research*, London: Cassell.

Tisdall, E., Davis, J. and Gallagher, M. (2010) *Researching with young children and young people*, London: SAGE.

Trend, R. (2005) Individual, situational and topic interest in geoscience among 11- and 12 year-old children, *Research Papers in Education*, 20 (3), 271 – 302.

Tripp, D. (1993) *Critical Incidents in Teaching: Developing Professional Judgement*, London: Routledge.

Tripp, D. (1994) Teachers' lives, critical incidents, and professional practice, *Qualitative Studies in Education*, 7 (1), 65 – 76.

Troyna, B. (1987) Beyond Multiculturalism: towards the enactment of anti-racist education in policy, provision and pedagogy, *Oxford Review of Education*, 13 (3), 307 – 320.

Troyna, B. (1995) Beyond Reasonable Doubt? Research 'race' in educational settings, *Oxford Review of Education*, 21 (4), 395 – 408.

UCAS (2015) *Unpacking qualification reform*,  
<https://www.ucas.com/sites/default/files/ucas-unpacking-qualification-reform-jan-15.pdf> retrieved 02/04/2017.

UNCRC (1989) *United Nations Convention on the Rights of the Child*,  
<https://www.unicef.org.uk/what-we-do/un-convention-child-rights/> retrieved  
03/04/2017.

Uto-Visi, J. (2001) Geography from a Student Perspective: A  
Hungarian Case Study, *International Research in Geographical and Environmental  
Education*, 10 (4), 379 – 388.

Valentine, G. (1997) Ode to a geography teacher: sexuality and the classroom,  
*Journal of Geography in Higher Education*, 21, 417 – 423.

Valentine, G. (1999) Being seen and heard? The ethical complexities of working with  
children and young people at home and at school, *Philosophy and Geography*, 2 (2),  
141 – 155.

Van Manen, M. and Adams, C. (2009) The phenomenology of Space in Writing  
Online, in Dall’Alba, G. (ed.) *Exploring education through phenomenology: Diverse  
approaches*, Oxford: Blackwell.

Van Teijlingen E. and Hundley, V. (2001) The importance of pilot studies, *Social  
Research Update* 35, Department of Sociology, University of Surrey.

Vasagar, J. (2011) *Oldham schools still polarised 10 years on from race riots*,  
<http://www.guardian.co.uk/education/2011/may/25/oldham-schools-polarised-race-riots>  
retrieved 20/01/2013.

Verloo, M. (2006) Multiple Inequalities, Intersectionality and the European Union,  
*European Journal of Women's Studies*, 13, 211 – 228.

Vidal Rodeiro, C. (2009) Uptake of GCSE and A-level subjects in England by Ethnic  
Group 2007, *Statistics Report Series No. 11, Cambridge Assessment*  
[http://www.cambridgeassessment.org.uk/Images/109903-uptake-of-gcse-and-a-  
level-subjects-in-england-by-ethnic-group-2007.pdf](http://www.cambridgeassessment.org.uk/Images/109903-uptake-of-gcse-and-a-level-subjects-in-england-by-ethnic-group-2007.pdf) retrieved 14/03/2014.

- Vygotsky, L. (1962) *Thought and language*, Cambridge, MA: MIT Press.
- Vygotsky, L. (1987) *The collected works of L.S. Vygotsky (Volume 1)*, Reiber, R. and Carton, A. (eds.), New York and London: Plenum Press.
- Wacquant, L. (2005) Habitus, in Becket, J. and Milan, Z. (eds.) *International Encyclopedia of Economic Sociology*, London: Routledge.
- Wagner, J. (2010) Ignorance in educational research: How not knowing shapes new knowledge, in Thomson, P. and Walker, M. (eds.) *The Routledge Doctoral Student's Companion: Getting to Grips with Research in Education and the Social Sciences*, Oxford: Routledge.
- Walford, R. (1996) 'What is geography?' An analysis of definitions provided by prospective teachers of the subject, *International Research in Geographical and Environmental Education*, 5, 69 – 76.
- Walford, R. (2001) *Geography in British Schools 1850 – 2000*, London: Woburn Press.
- Wallman, S. (1986) Ethnicity and the Boundary Process in context, in Rex, J. and Mason, D. (eds.) *Theories of Race and Ethnic Relations*, Cambridge: Cambridge University Press.
- Walshe, N. (2007) Understanding teachers' conceptualisations of geography, *International Research in Geographical and Environmental Education*, 16 (2), 97 – 119.
- Waugh, D. and Bushell, T. (1991) *Key Geography*, Cheltenham: Nelson Thornes.
- Weeden, P. (2006) *Pupils' perceptions of geography: a literature review*.  
<http://www.rgs.org/NR/rdonlyres/E4AB8EC3-89B6-4E75-BC5E-0E7BFB533D5B/0/perceptionsofgeography2006.pdf> retrieved 04/08/2010

Weeden, P. (2007) Students' perceptions of geography: decision making at age 14, *Geography*, 92 (1), 62 – 73.

Weeden, P. (2011a) *An investigation into changing patterns of entry for GCSE geography: choice, diversity and competition*, Unpublished PhD thesis, University of Birmingham.

Weeden, P. (2011b) Inequality of opportunity and the take-up of GCSE geography, *Curriculum Journal*, 22 (3), 401 – 422.

Weeden, P. and Lambert, D. (2010) Unequal access: why some young people don't do geography, *Teaching Geography*, 35 (2), 74 – 75.

Wiegand, P. (1996) Interviews, in Williams, M. (ed.) *Understanding geographical and environmental education*, London: Cassell.

White, J. (2007) What are schools for, and why? *Impact*, 14, vi – 51.

Whitehead, J. (1984) Motives for Higher Education: a study of intrinsic and extrinsic motivation in relation to academic achievement, *Cambridge Journal of Education*, 14, 26 – 34.

Whitehead, J. (1994) Academically Successful Schoolgirls: a case of sex role transcendence, *Research Papers in Education*, 9, 53 – 80.

Whitty, G. and Wisby, E. (2007) Whose Voice? An Exploration of the Current Policy Interest in Pupil Involvement in School Decision-Making, *International Studies in Sociology of Education*, 17 (3), 303 – 319.

Wilkin, A., Derrington, C., White, R., Martin, K., Foster, B., Kinder, K. and Rutt, S. (2010) *Improving the outcomes for Gypsy, Roma and Traveller pupils: final report*, NfER

[https://www.gov.uk/government/uploads/system/uploads/attachment\\_data/file/181669/DFE-RR043.pdf](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/181669/DFE-RR043.pdf). retrieved 13/03/2014.

Williams, M. (1999) Research in geographical education, *International Research in Geographical and Environmental Education*, 8 (3), 301 – 304.

Wimmer, A. (2008) The Making and Unmaking of Ethnic Boundaries: A multilevel process theory, *American Journal of Sociology*, 113 (4), 970 – 1022.

Winter, C. (2007) Just maps: the geography curriculum in English schools, *Oxford Review of Education*, 33 (3), 349-366.

World Economic Forum (2017) *The Global Risk report 2017*, <http://reports.weforum.org/global-risks-2017/part-1-global-risks-2017/> retrieved 02/04/2017.

Yates, L. and Young, M. (2010) Editorial: Globalisation, knowledge and the curriculum, *European Journal of Education*, 45 (1), 4 – 10.

Yin, R. (2009) *Case Study Research: Design and Methods*, Thousand Oaks, CA: SAGE.

Young, M. (1971) *Knowledge and control: New Directions for the Sociology of Education*, London: Collier Macmillan.

Young, M. (2008a) *Bringing Knowledge Back In: From social constructivism to social realism in the sociology of education*, Abingdon: Routledge.

Young, M. (2008b) From Constructivism to Realism in the Sociology of the Curriculum, *Review of Research in Education*, 32 (1), 1 – 28.

Young, M. (2013a) *Powerful Knowledge: to what extent is this idea applicable to school geography?*, lecture and discussion forum at The Institute of Education, London, 15<sup>th</sup> May 2013.



Young, M. (2013b). Overcoming the crisis in curriculum theory: A knowledge-based approach, *Journal of Curriculum Studies*, 45, 101 – 118.

Young, M. (2014) Why start with the curriculum? in, Young, M., Lambert, D., Roberts, C. and Roberts, M. (eds.) *Knowledge and the future school: Curriculum and social justice*, London: Bloomsbury.

Young, M. and Muller, J. (2010) Three Educational Scenarios for the Future: lessons from the sociology of knowledge, *European Journal of Education*, 45 (1), 11 – 27.

Zevallos, Z. (2017) *Intersectionality and the Women's march*, <https://othersociologist.com/2017/01/25/intersectionality-womens-march/> retrieved 15/02/2017.

## Appendices

### *Appendix 6.i Ethical considerations at the beginning of the research process*

#### **External considerations**

##### *What is the culture of the institution in which I am working?*

The school in which I work and where this research is based was a training school (until 2010) and there is a legacy and culture of staff development with a focus on teaching and learning. Monthly 'learning lunches' allow staff to share good practice and approximately 20% of staff have enrolled on and completed Teacher Learning Academy (TLA) projects at stage 1 and 2 (College of Teachers, 2013). The curriculum deputy developed the middle leader development programme in the county and my Masters (completed between 2008 and 2011) was a joint collaboration between the school and Oxford Brookes University. The school is currently part of a local teaching school alliance with the focus on professional development and raising standards and offers the school direct route of Initial Teacher Education (Department for Education, 2013a). Therefore, the culture in the school is one of fostering and developing research and dissemination to improve teaching and learning.

##### *How do the parts of the institution fit together? and What are the priorities of the people I am working with?*

As Curriculum Manager for Humanities and Head of Geography I can, to an extent, set my own agenda and development plan and also influence the school development plan. However, despite the proportion of ethnic minority students increasing dramatically (Chapter 1), this is not an explicit area of focus for the Senior Leadership Team. The makeup of the geography department has changed considerably during the last couple of years, both in terms of personnel and in the priorities of existing members. While we are all focused on making the teaching and learning experience excellent, other members of the department may prioritise producing resources and teaching outstanding lessons to effectively achieve this. I do not feel that they perceive

a focus on ethnic minority students and their stories as moving this agenda forward in the same way and therefore may not see the direct relevance of this research.

*What do the sponsors expect from my project?*

As a part-time doctoral student, self-funding the bulk through employment, it could be argued that, with a lack of external sponsorship, this is not a consideration. However, I have secured a small sum from a local charity and will recognise this in my acknowledgements.

*What are the relevant codes of practice?*

In addition to completing and submitting the University of Cambridge Faculty of Education statement of ethics as part of my registration viva, I have read the BERA code of practice (2011) and also the British Psychological Society code of ethics and conduct (2009). The British Psychological Society highlights four principles of respect, competence, responsibility and integrity which interlink and overlap with the framework adopted here. Respect covers informed consent, self-determination and privacy and confidentiality, while competence refers to the researcher's own competences within the field and their consideration of ethics. Responsibility covers harm during the research and beyond, particularly discussing ethical behaviour at the conclusion of a research relationship. Finally, integrity refers to maintaining personal boundaries, honesty and accuracy and issues of exploitation and conflicts of interest. BERA has a different organisational structure considering responsibilities to participants, sponsors, the community of educational researchers and educational professionals, policy makers and the general public. While it is tempting to focus on participants, BERA highlights that other groups should not be ignored. Particularly, it is important that the research is reputable and that findings are shared effectively and not sensationalised. The areas discussed with regards to responsibilities to participants are those of voluntary informed consent, openness and disclosure, the right to withdraw, children, vulnerable young people and vulnerable adults, incentives, detriment arising from participation in research, privacy and disclosure.

Informed consent requires addressing regardless of the research context however, Valentine (1999) highlights that it is particularly challenging when research participants are children and the responsibility of their parents or guardians. She also distinguishes between consent and assent and puts forward the argument that children should not consent but assent until the age of 18, although she also acknowledges that this is a contentious area as some young people develop more quickly, and are thus able to make an informed decision at an earlier age than others. Also important is that the consent is informed and information covering the aims, methods, benefits, outcomes and risks needs to be available to all and in an accessible format. While the students will be at the upper end of this age category I have obtained consent from the Headteacher, Head of Sixth Form (who is also an Assistant Head), the Heads of Year 12 and 13 (identified as 'gatekeepers'), students and their parents before embarking on the research (see Chapter 7). A leaflet of information has also been available to maintain openness and ensure that those involved understand the purposes, processes, outcomes and ways in which the research will be disseminated. Consent must be seen as continuous rather than as a one-off decision therefore I have ensured that I continue to have consent and confirmed at each stage that students have the right to withdraw without prejudice.

#### *What resources are available?*

This research project is small-scale in scope and will require limited resources; the main consideration being time, both that of the participants and my own. I will ensure I make efficient use of both so that I collect enough data while not intruding unnecessarily into participant's free time.

#### *How do I ensure that I have good quality evidence on which to base conclusions?*

As the research has the potential to be transformatory it is vital that the evidence on which my conclusions are based is of quality i.e. trustworthy and rich (Bassey, 1999). The greatest issue is likely to be the volume of data which the methods, particularly interviews, may generate. I will adopt a consistent, methodical and achievable strategy throughout the planning, data collection and analysis phases to ensure that I maintain a balance between quantity and quality.

### *What does the law say?*

While not breaking the law seems obvious and not particularly an issue with the topic and methods selected for this study, much of the law surrounding research regards issues of privacy and confidentiality. This is particularly acute when sensitive personal data e.g. regarding ethnicity, is being used (Alderson and Morrow, 2004). Therefore, data will be kept private and secure to comply with the Data Protection Act (1998). Practically, a discussion of confidentiality will be part of the process of informed consent and those who will have access to the data – myself, my supervisor, thesis assessor and gatekeepers - will be limited and outlined. Participants will also be made aware that the raw data will be kept on a password protected computer or locked filing cabinet (for hard copies) for five years and will be anonymised through the use of pseudonyms. Additionally, the data will not be passed to any third party without the participants consent. By involving students as researchers there are issues regarding data ownership as I will want to use data collected by students in my thesis. I have included a line on the consent form (Appendix 7.ix) asking for permission to use the students work and will also fully acknowledge their contribution in any publications. There may also be the opportunity to co-author articles or co-present at conferences with the students to disseminate findings.

In terms of working with young people, I am criminal records bureau (CRB) checked and cleared. BERA also requires researchers to comply with Articles 3 (the best interests of the child must be the primary consideration) and 12 (children capable of forming their own views should be granted the right to express their views freely in all matters affecting them) of the United Nations Convention on the Rights of the Child (UNCRC, 1989).

### *What are the risks that are involved?*

I need to ensure that the risks of participation are no greater than those involved in the students' normal lives. These need to be identified and procedures developed in order to minimise them, a process formally outlined in the faculty risk assessment. The most likely risk is that students' stories contain negative experiences and relationships as well as positive ones. At every point of contact I will relocate the participants within the research and they will be given the opportunity to opt out. They will also be offered

school-based support from someone outside the research – their form tutor, Head of Year or school counsellor.

## **Consequential considerations**

*Which individuals will benefit from my project and in what way? and Which groups of people might benefit from my project and in what way?*

The principle of benefit maximisation outlined by Cohen *et al.* (2000) identifies that the best ethical decision is the one which brings the most benefit to the greatest number of people. While Anderson (1998) highlights that this is difficult to assess, Strike (1990) suggests that it is a pragmatic consideration as it judges the decisions made by their consequences. It is also important to remember that benefits for some can entail risks for others.

As the students are central to this research it is essential they benefit from the process, however, Alderson (1995) argues that it is harder for an educational researcher to claim the research is in the students' best interests compared to, for example, medical interventionist research where the benefits are much clearer. I am aiming to explore students' representations of geographical knowledge and subsequently, this may enable them to understand the influence this has on their choices and empower them to change, reconsider, or, at least, consider more deeply, within the context of this 'new' knowledge. Of course, while this may provide benefits for the participants it may also be seen as a threat to those who are content with the status quo – who may also be participants - and do not see any benefit in challenging it. Additionally, I would argue that, as an area of research which has previously been neglected, this has served to marginalise an already marginal group and therefore, including them in the research arena and providing them with the opportunity to tell their stories may lead to both individual and wider benefits for different ethnic groups.

From a pragmatic perspective, this research brings benefits at a range of scales. Firstly, at a departmental level, if I can shed understanding on the aspects which influence student choices, we can address features which are within our control in an attempt to be more inclusive and increase uptake within those groups which are under-

represented. Secondly, at a school level there are other curriculum managers, particularly in languages and arts, who have similar issues with uptake and others, maths and sciences, who have the opposite problem – they are over-represented in certain ethnic minority groups where weaker students have opted due to the perceived benefits of a scientific grounding and this has had a negative impact on examination results. Thirdly, while the patterns observed at Claytons are different to the national picture, the main headline of under-representation of ethnic minorities is constant and an understanding of the stories which shape the perception of geographical knowledge may lead to a greater awareness and practical intervention.

*Is my project worthwhile in the wider sense?*

There are currently two debates central within geography education, both of which have a policy angle. The first is the introduction of the EBacc – a measure used for performance tables where the % of students achieving grades A\* - C in English, maths, science, a language and history or geography is published (Department for Education, 2013b). The number of students taking geography for GCSE has declined significantly in the last decade, from around 240,000 in 2003 to just over 187,000 in 2012 and it is hoped that geography's inclusion in the EBacc will help to reverse this trend (Department for Education, 2013c; Joint Council for Qualifications, 2013; Royal Geographical Society, 2013). In combination with this, there is the current governmental consultation on the National Curriculum for Key Stages 1 – 3, and specifically the place of knowledge within it. While most geography educators concede that knowledge is necessary for geographical understanding there is heated debate from both ends of the knowledge – skills continuum as to what this knowledge should constitute and how it should be taught (Geographical Association, 2013b).

Coupled with this, there has been a dearth of research which is an authentic account of children as they are, rather than their stories re-told by parents and teachers, or simply tallies of key words and phrases, therefore, research which integrates the voice of the child in the research process is likely to be beneficial (Valentine, 1999). Listening to voices from minority groups of students also adds an important dimension to this research. It is vital that their voices are heard throughout the process, from conception to dissemination, in order to avoid tokenism, although it is acknowledged that this may conflict with issues of confidentiality, and this research also aims to

engage the students in all aspects of the research process so that they can claim ownership of it (Valentine, 1999).

This research therefore contributes to these debates by providing a study into exploring ethnic minority student representations of geographical knowledge which is unique. By understanding how students view geographical knowledge lends an alternative perspective, tying discussions together by encouraging teachers to address the relevance of the curriculum for their students.

*How am I going to benefit from this project?*

Finally, a discussion of benefits is not complete without a discussion of how I will benefit. At a superficial level it will inevitably develop my practical research skills and my own knowledge, both with regards to methodology and issues of ethnicity in geography education. In addition, it is likely that engaging in the research will lead to opportunities for career development, progression or variety and, upon completion, I will be awarded a doctoral degree.

## **Deontological considerations**

*Avoiding doing harm*

Alderson and Morrow (2004) identify 'harm' as being highly complex. Often imperceptible and intangible, it can be shaped by different contexts, obscured by different viewpoints and can vary temporally. It can also come in many guises – physical, psychological, social – and may involve limiting the freedom of interaction or equality of opportunity and intrusion into privacy. While on the face of it, the discussion of representations of geography may not appear to be harmful, Alderson (1995) highlights that it is hard for social scientists to evaluate potential harm and suggests asking for consent from both the child and the parent rather than one or the other, which I have done.



### *Avoiding doing wrong*

It is also sometimes difficult to judge whether an action is 'right' or 'wrong' and Stutchbury and Fox (2009) suggest that decisions should be seen in terms of whether the consequences bring the most good to the greatest number of people. These decisions are most likely to occur in the data collection phase and this process can be facilitated by being open with participants, informing them of every stage of the research process and reiterating that their participation is voluntary.

### *Being fair*

I cannot unequivocally state that I will treat all participants equally as some may need greater support or may discuss their stories in greater detail. However, I will attempt to treat all participants fairly by giving them equal access to information and by acknowledging their contribution using pseudonyms. While I will not use tangible rewards or incentives, there may be intangible benefits for some students, such as the opportunity to discuss their stories in depth, which may not be applicable to others.

### *Being considerate*

Being a practitioner-researcher within the context of the institution in which I work brings ethical issues which could cause conflict between my different roles (Glen, 2000). I am paid to be a teacher, the Head of Geography and the Curriculum Manager for Humanities, I am not paid to be a researcher - my research is nevertheless entwined with these roles. Practically, I will not work on my research during the 'normal' school day although this may have ethical implications for the students in terms of access, equality of opportunity and harm. If I interview them during lunchtime or after school this will not intrude into their curriculum time and learning yet, it will limit their free time. A balance needs to be struck so that all participants are comfortable with the arrangements. When carrying out data collection, I will make my role explicit e.g. when interviewing I will make my role as researcher clear and highlight that nothing they say will have repercussions on their school work or treatment in class.

### *Telling the truth*

This is most likely to be an issue in the analysis and dissemination phase of the research as covert research methods are unlikely. I need to ensure that I am competent in my use of methods and have highlighted this as a focus of development in my EdD logbook. Specifically, this means carrying out a pilot study to trial the methods. I also need to strive for accuracy in the analysis, findings and reporting stages and will ask participants to check and sign their transcripts. Conflict may occur if there is something that the participants, school or department do not agree with and I need to consider how I deal with this and how to report unpopular findings to a wider audience.

### *Keeping promises*

Keeping promises seems fairly straightforward yet it can be fraught with difficulty, dependent and independent of the lens through which ethical behaviour is viewed. Stutchbury and Fox identify that viewing through a deontological lens suggests that 'certain actions are 'right' regardless of the consequences, because they involve behaving in a particular way' (2009: 490), which they contrast with a utilitarian lens which views the outcomes and then judges the action accordingly. Thus, for a deontologist keeping promises is 'right', whereas for a utilitarian, breaking promises is morally right if it brings 'good' to a large number of people. There is also the issue of child protection as the research relationship can result in students opening up to the researcher and confiding in them. If the student discusses anything which could be seen as a child protection issue then the researcher needs to make it clear where they stand with regards keeping promises and confidentiality so the student can make a judgement whether or not to disclose.

### *Doing the most positive good*

It is important to consider whether there are other ways of carrying out the research which would result in greater benefits for the participants. The changes made to

involve students as researchers suggests this strategy will result in the most positive good.

## **Core rationale**

### *Collaborating and establishing trust*

While there are a range of people indirectly involved– the gatekeepers, my department, the parents - those who are most involved in the research will be the students who opt in to both my research strand and the students as researchers programme. This latter group will operate as a parallel strand and collaborate to decide on methods, collect data and analyse and interpret the findings. I will establish trust by being open about all stages of the research process and encouraging them to be open with me.

### *Avoiding imposition and respecting autonomy*

I am working within my own school so there will be limited issues regarding accessibility. However, those that opt in to both strands of the research need to be aware that it is likely to be a long process and I will make it clear that participation is voluntary.

### *Confirming findings*

This research will use the methodology of case study. The students will be involved in all stages of the research including the analysis and validation of the findings. I will report in an accessible way to students and parents by inviting them to a meeting in which we discuss findings and give the opportunity to ask questions. I will also attempt to involve students in the reporting of findings by encouraging them to speak at conferences such as the Geographical Association reporting research forum and to input into articles which may arise as a result of the research.

### *Respecting persons equally*

Demonstrating respect for all participants is partially covered in previous discussions regarding the ability to opt in and out of the study, the use and storage of data, privacy and confidentiality and ensuring that methods are suitable for the age and abilities of the students. It is important to treat both students and teachers in a similar way and to be inclusive. Practical ways of achieving this include: inviting students to have a key role in the design of the study, avoiding the use of exclusionary language, adapting or adopting techniques so that all eligible students can participate and avoiding condoning prejudice and stereotypes (Alderson and Morrow, 2004).

## Appendix 7.i The pilot questionnaire

These questions identify the level of formal geographical experience which the students have had. I would like the case study students to reflect these different experiences. If students have not opted to take geography, then these stories are of equal importance.

### EXPLORING GEOGRAPHICAL KNOWLEDGE

I am conducting a small-scale piece of research into perceptions of geographical knowledge from a range of perspectives. This questionnaire is seeking to identify what Sixth Form students perceive to be geographical knowledge as well as interest and suitability for being involved in a deeper study. I am looking for a wide range of participants including those who have not studied geography at GCSE or A level and also those that have. It would be greatly appreciated if you would be involved in the initial stages of the research by either completing the attached questionnaire or completing the questionnaire at

to complete and you only need to write more in-depth study. If you choose not

2. a) Did you study Geography at GCSE level?

☐ Yes

☐ No

b) Did you study / are you studying Geography at AS level?

☐ Yes

☐ No

c) Might you study / are you studying Geography at A level?

☐ Yes

☐ No

3. How would you describe your ethnicity?

☐ White British

☐ Other White background

☐ African

☐ Caribbean

☐ Other Black background

☐ Pakistani

☐ Indian

☐ Chinese

☐ Bangladeshi

☐ Other Asian background

☐ White and Asian

☐ White and Black African

☐ White and Black Caribbean

☐ Other Mixed background

☐ Irish

☐ Other \_\_\_\_\_

☐ Prefer not to say

4. a) Would you be prepared to be involved in a more in-depth study exploring similar issues?

☐ Yes

☐ No

b) If 'yes', please write your name and contact e-mail below. Please be assured that your name and contact details will be used for no other purpose than for this research.

Name: \_\_\_\_\_

Contact e-mail: \_\_\_\_\_

Thank you for taking the time to complete this questionnaire. Please return paper copies to Mrs. Kitchen's tray outside the staffroom or the Humanities office.

These statements are included here to gauge the students' different perspectives of geography and to inform my selection of students. They were adapted from a workshop at the Geographical Association annual conference in 2012 (see Table 2.2).

different responses to the question 'What putting the numbers 1 – 8 in the boxes, is your view of geography.

and understanding of the world, its human of the countries of the world.

and activities in places, communities and by they are as they are, what this means for

ness, knowledge and understanding about and their interactions to develop a sense of engagement with the earth.

relations, processes and consequences of the as over the surface of the Earth.

human features and environments and the

ers, concerns and issues and sustainability, se of personal and communal responsibility

ween and the independence of people and of the processes that sustain these d influences on people and the natural

atures and places are on the Earth, to build

While this question regarding ethnicity is sensitive, and issues surrounding ethnic groupings is discussed in Chapter 3, it is essential that I have an idea of how students describe their ethnicity as there is a real danger otherwise that I do not get an ethnic mix among the case study students. The answer to this question can be discussed more fully during the interview.

## Appendix 7.ii A completed pilot questionnaire

**EXPLORING GEOGRAPHICAL KNOWLEDGE**

I am conducting a small-scale piece of research into perceptions of geographical knowledge from a range of perspectives. This questionnaire is seeking to identify what Sixth Form students perceive to be geographical knowledge as well as interest and suitability for being involved in a deeper study. I am looking for a wide range of participants including those who have not studied geography at GCSE or A level and also those that have. It would be greatly appreciated if you would be involved in the initial stages of the research by either completing the attached questionnaire or completing the questionnaire at <http://www.surveymonkey.com/s/XCG5L6N>.

The questionnaire should only take a few minutes to complete and you only need to write your name if you would like to be considered for the more in-depth study. If you choose not to write your name you will not be able to be identified or traced i.e. confidentiality and anonymity are assured. If you have any questions or would like to discuss any aspect of this questionnaire or my research please do not hesitate to contact me.

Thank you

*[Signature]*  
Mrs. R. Kitchen  
[rk57@cam.ac.uk](mailto:rk57@cam.ac.uk)

1. Look at the statements below which show 'is Geography?' Rank the statements by where 1 is the statement which best describes Geography.

2	Geography develops an informed knowledge of physical features and environments and how they relate to others.
8	Geography is the study of people's lives, cultures to understand what they are like, them and how they relate to others.
3	Geography draws on a variety of disciplines: people, places, cultures, the physical world, global responsibility for managing human environments.
7	Geography studies the spatial distribution, interaction of physical and human phenomena.
5	Geography studies the Earth, its physical forces and processes that shape them.
1	Geography investigates environmental management locally and globally, linked to generating a sense of responsibility for the Earth, its people and its environment.
6	Geography investigates the interactions between their natural and social environments, interrelationships and of their impacts on the environment.
4	Geography develops knowledge of where things are and an awareness of the wider world.

2. a) Did you study Geography at GCSE level?  
☐ Yes ☒ No

b) Did you study / are you studying Geography at AS level?  
☐ Yes ☒ No

c) Might you study / are you studying Geography at A level?  
☐ Yes ☒ No

3. How would you describe your ethnicity?  
☐ White British ☒ Other White background  
☐ African ☐ Caribbean  
☐ Other Black background ☐ Pakistani  
☐ Indian ☐ Chinese  
☐ Bangladeshi ☐ Other Asian background  
☐ White and Asian ☐ White and Black African  
☐ White and Black Caribbean ☐ Other Mixed background  
☐ Irish ☐ Other \_\_\_\_\_  
☐ Prefer not to say

4. a) Would you be prepared to be involved in a more in-depth study exploring similar issues?  
☐ Yes ☒ No

b) If 'yes', please write your name and contact e-mail below. Please be assured that your name and contact details will be used for no other purpose than for this research.

Name: \_\_\_\_\_  
 Contact e-mail: \_\_\_\_\_

Thank you for taking the time to complete this questionnaire. Please return paper copies to Mrs. Kitchen's tray outside the staffroom or the Humanities office.

*"Good instructions although those who don't study geography don't understand the question as well."*

*"I don't do geography so the first section could have been made clearer"*

*"Good, clear layout and instructions. I like the tick boxes as it makes it quicker"*

*"Question 1 has a lot of similar options which all describe geography so it's hard to put in order"*

**Selected quotes from pilot questionnaire feedback.**

### *Appendix 7.iii The final questionnaire used during the first phase of research*

#### EXPLORING GEOGRAPHICAL KNOWLEDGE

I am conducting a small-scale piece of research into perceptions of geographical knowledge from a range of perspectives. This questionnaire is seeking to identify what sixth form students perceive to be geographical knowledge as well as interest and suitability for being involved in a deeper study. I am looking for a wide range of participants including those who have not studied geography at GCSE or A level and also those that have. It would be greatly appreciated if you would be involved in the initial stages of the research by completing the attached questionnaire.

The questionnaire should only take a few minutes to complete and you only need to write your name if you would like to receive further information regarding the second phase of the research. If you choose not to write your name you will not be able to be identified or traced i.e. confidentiality and anonymity are assured. If you have any questions or would like to discuss any aspect of this questionnaire or my research please do not hesitate to contact me.

Thank you



Mrs. R. Kitchen

[rjk52@cam.ac.uk](mailto:rjk52@cam.ac.uk)

1. Write a short paragraph which defines what you understand by the term 'geographical knowledge'.

2. What words do you associate with the term 'geographical knowledge'?

- 3.
- |    |   |    |
|----|---|----|
| a) | Did you study Geography at GCSE level?                    |    |
|    | Yes   | No |
| b) | Did you study / are you studying Geography at AS level?   |    |
|    | Yes   | No |
| c) | Might you study / are you studying Geography at A2 level? |    |
|    | Yes   | No |

4. Which of the following subjects are you studying in the sixth form? Please underline or highlight.

Art and Design	Drama	Music
Physical Education	D&T: Product Design	Economics
Communication and Culture	English Language and Literature	Geography
English Literature	Business Studies	History
Government and Politics	Religious Studies	French
German	Spanish	Mathematics
Biology	Chemistry	Physics
Psychology	Film Studies	Latin
Further Maths	Mandarin Chinese	Statistics
Photography	Critical Thinking	History of Art
General Studies	World Development	Sports Leaders
Dance Leaders	Extended Project (EPQ)	

5. In which year did you start at Claytons Academy? e.g. Year 8

---

6. How would you describe your ethnicity? Please underline or highlight.

White British	Other White background
African	Caribbean
Other Black background	Pakistani
Indian	Chinese
Bangladeshi	Other Asian background
White and Asian	White and Black African
White and Black Caribbean	Other Mixed background
Irish	Other _____
Prefer not to say	

7. a) Might you be prepared to receive further information regarding the second phase of the research?

Yes No

b) If 'yes', please write your name and contact e-mail below. Please be assured that your name and contact details will be used for no other purpose than for this research.

Name: \_\_\_\_\_

Contact e-mail: \_\_\_\_\_

Thank you for taking the time to complete this questionnaire. Please return completed responses to your form tutor or directly to Mrs. Kitchen.



*Appendix 7.iv A copy of the e-mail sent to Year 12 and 13 form tutors*

Dear Year 12 tutors,

I am currently carrying out a piece of research into students' representations of geographical knowledge, particularly from an ethnic minority perspective. The research is primarily for my doctoral research but will, among other things, feed into my appraisal targets and provide useful information for the EAL working party.

Phase 1 of this research is a questionnaire which will be completed by Year 12 students during registration on **Thursday 20th November**.

I will put a copy of the following instructions, a pink register for your tutor group and copies of the questionnaire (one each) in your register pigeon hole on Thursday morning. If you could follow the instructions for completion and return I would be very grateful. Also, if you or your tutees have any questions either before, during or after the process please do not hesitate to ask.

Thanks in advance

Becky

*Appendix 7.v The instructions for questionnaire administration.*

Instructions for carrying out the questionnaire

Dear Year 13 tutors,

Thank you in advance for facilitating the completion of these questionnaires. I need to follow fairly rigid procedures in order to make the research valid and so I would really appreciate it if you could follow the instructions below:

- This questionnaire should be carried out during registration on Monday 17<sup>th</sup> November.
- Please give out a questionnaire to each of your tutees and mark students who are absent on the pink register list.
- Please read out the following to your tutor group before they start filling in the questionnaire:

**Mrs Kitchen is conducting a piece of research into representations of geographical knowledge. This questionnaire is seeking to identify what you perceive to be geographical knowledge as well as interest and suitability for being involved in a deeper study.**

**It would be greatly appreciated if you would be involved in the initial stages of the research by completing the attached questionnaire. The questionnaire should only take a few minutes to complete and you only need to write your name if you would like to receive further information regarding the second phase of the research.**

**Mrs Kitchen is looking for a wide range of participants in this second phase including those who have not studied geography at GCSE or A level and also those that have.**

**If you choose not to write your name you will not be able to be identified or traced i.e. confidentiality and anonymity are assured. If you have any questions or would like to discuss any aspect of this questionnaire or research please contact Mrs Kitchen.**

- Students should then complete the questionnaire. There is no particular time limit although it will probably take between 5 and 10 minutes to complete.
- When all students have completed their questionnaires please put all questionnaires and the completed pink register sheets into the plastic wallet.
- Please send a member of the form with the plastic wallet to Mrs. Kitchen in T34 by the end of registration.

Thanks

Becky Kitchen

## *Appendix 7.vi The information sheet sent to all Year 12 and 13 students*

Dear students and parents,

I am currently undertaking research for my EdD (Doctor of Education) thesis with the University of Cambridge. The research focuses on ethnic minority representations of geographical knowledge and how their stories relate to these perspectives and link with the choices they have made at GCSE and A level.

I am writing to inform you of the study as your daughter has been asked to participate in the initial stage of this research by completing a questionnaire. This will be carried out in registration during the week beginning Monday 17<sup>th</sup> November and will take between 5 and 10 minutes to complete. The main phase of the research will involve approximately ten Year 12 and 13 students who will create a collage depicting their view of geographical knowledge, create a critical incident chart and undertake at least one semi-structured interview. All Year 12 and 13 students are invited to opt into this part of the research process, regardless of ethnicity or whether or not they took geography at GCSE and / or A level, and if your daughter has expressed an interest in being involved you will receive a detailed information sheet and consent form to sign and return.

All information collected as part of the study will be kept strictly confidential (subject to legal limitations) and confidentiality, privacy and anonymity will be ensured by anonymising names of students and the school. Any data generated in the course of the research will be kept securely in paper or electronic form for a period of five years after the completion of the research project.

The results of the research will be used in my EdD thesis which will be published and available from the University of Cambridge Faculty of Education library. The results will also be shared at a Geographical Association conference where I hope to deliver a lecture on my findings.

You can contact me for further information - [rjk52@cam.ac.uk](mailto:rjk52@cam.ac.uk) - or my supervisor, Liz Taylor, at the Faculty of Education, University of Cambridge. If you have any concerns about the way in which the study has been conducted, you should contact Richard Byers, the EdD programme course at [rb218@cam.ac.uk](mailto:rb218@cam.ac.uk)

Yours sincerely



Mrs. R. Kitchen

Curriculum Manager for Humanities and Head of Geography  
Claytons Academy

*Appendix 7.vii The covering letter sent to students invited to be part of the second phase*

Dear student,

You may remember last November completing a questionnaire about geographical knowledge which was for the first stage of my doctoral research project. As part of the questionnaire students were asked to indicate whether or not they would like further information about being part of the second phase of the research. 75 students responded saying that they would like to be involved and I have selected 10 of these students to take part in the second phase. You are one of these students!

I have enclosed an information sheet about what the research will involve. Please read it carefully. There is also a consent form which you will need to sign and return to me by **Friday 13<sup>th</sup> February** if you would like to be involved. If you do not want to be involved in this second phase please could you let me know as soon as possible so that I can contact someone else on the list?

If you have any questions or queries about anything in the pack or the research in general, please do not hesitate to contact me at [rjk52@cam.ac.uk](mailto:rjk52@cam.ac.uk)

Thanks

Mrs. Kitchen

*Appendix 7.viii The information sheet sent to students invited to be part of the second phase*

**What does geographical knowledge look like from ethnic minority perspectives?  
Exploring stories that relate to perspectives and link with option choices.**

*You are being invited to take part in a research study. Before you decide whether or not to take part, it is important for you to understand why the research is being done and what it will involve. Please take time to read the following information carefully.*

**What is the purpose of the study?**

Nationally, and at a school level, the uptake of geography by ethnic minority students is very uneven. I am therefore embarking on research which investigates student representations of geographical knowledge and explores their geographical stories and the option choices that they have made. As one of ten case study students you will be asked to create a collage which represents your view of geographical knowledge, undertake critical incident charting and be interviewed on at least one occasion.

**Why have I been invited to participate?**

You have been invited to participate because you are in Year 12 or Year 13 and you have shown an interest in taking part. I can accommodate ten students in the research and you have been randomly selected from the 75 students who initially showed an interest.

**Do I have to take part?**

*It is up to you to decide whether or not to take part. If you do decide to take part you will be given this information sheet to keep and be asked to sign a consent form. If you decide to take part you are still free to withdraw at any time and without giving a reason. Choosing to either take part or not take part in the study will have no impact on your marks, assessments or future studies.*

**What are the possible disadvantages and risks of taking part?**

I hope that you enjoy being a part of the research. However, it will obviously require a commitment of your time which is likely to be about five hours in total. This will be at a time convenient to you and can be spread over the course of several weeks or months within this academic year.

**What are the possible benefits of taking part?**

By taking part in the research you will have the opportunity to clarify your own ideas of geographical knowledge which may help your understanding of the subject and the reasons you made the choices you did at GCSE and A level. It will also help me to identify areas of the subject which you think are important and will be useful to the wider geographical community in investigating how students of different ethnicities represent geographical knowledge which in turn may help to address reasons for the under-representation of different ethnic groups at GCSE and A level.

**Will what I say in this study be kept confidential?**

All information collected about you will be kept strictly confidential (subject to legal limitations) and confidentiality, privacy and anonymity will be ensured by anonymising names of students and the school. Any data generated in the course of the research will be kept securely in paper or electronic form for a period of five years after the completion of the research project.

**What should I do if I want to take part?**

If you want to take part, make sure that you take this information sheet and attached consent form home to be read and signed. I need to have this documentation by **Friday 13<sup>th</sup> February 2015**.

**What will happen to the results of the research study?**

The results of the research will be used in my EdD thesis which will be published and available from the Faculty of Education, University of Cambridge library. The results will also be shared at a Geographical Association conference where I hope to deliver a lecture on my findings.

**Who is organising and funding the research?**

I am conducting the research as a student at the Faculty of Education at the University of Cambridge. The research is being carried out at Claytons where I am employed as Curriculum Manager for Humanities and Head of Geography.

**Who has reviewed the study?**

The research has been approved by the University Research Ethics Committee, University of Cambridge and has passed a registration process carried out by the Faculty of Education, University of Cambridge.

**Who do I contact for further information?**

You can contact me for further information – my contact details are at the bottom of the page – or my supervisor, Liz Taylor at the Faculty of Education, University of Cambridge. If you have any concerns about the way in which the study has been conducted, you should contact, Richard Byers, the EdD programme course at [rb218@cam.ac.uk](mailto:rb218@cam.ac.uk)

Thank you for taking the time to read the information sheet.

Mrs. R. Kitchen

[rik52@cam.ac.uk](mailto:rik52@cam.ac.uk)

**Consent form – please return to Mrs. Kitchen in the geography office by Friday 13<sup>th</sup> February 2015**

**What does geographical knowledge consist of from ethnic minority perspectives?  
Exploring stories that relate to representations and link with option choices.**

**Please initial box**

- |    |  |                          |
|----|--|--------------------------|
| 1. | I confirm that I have read and understand the information sheet for the above study and have had the opportunity to ask questions. | <input type="checkbox"/> |
| 2. | I understand that my participation is voluntary and that I am free to withdraw at any time, without giving reason.                 | <input type="checkbox"/> |
| 3. | I agree to take part in the above study.   | <input type="checkbox"/> |

**Please tick box**

- |  | <b>Yes</b>               | <b>No</b>                |
|--|--------------------------|--------------------------|
| 4. I agree to the interview being audio recorded and for the collage to be video recorded. | <input type="checkbox"/> | <input type="checkbox"/> |
| 1. I agree to the use of anonymised quotes in publications                                 | <input type="checkbox"/> | <input type="checkbox"/> |

\_\_\_\_\_  
Name of Participant

*Mrs. Rebecca Kitchen*

\_\_\_\_\_  
Date

*30<sup>th</sup> January 2015*

\_\_\_\_\_  
Signature



\_\_\_\_\_  
Name of Researcher

\_\_\_\_\_  
Date

\_\_\_\_\_  
Signature

Appendix 8.i The pilot study: a) Hannah's collage b) three stage semiotic analysis of Hannah's collage



**Iconic** – volcano to represent ‘physical geography’

**Indexical** – volcano represents power and inability to control natural phenomena

**Symbolic** – volcano drawn as cross-section; geographical skill and representation of geographical process, rather than ‘volcano’.

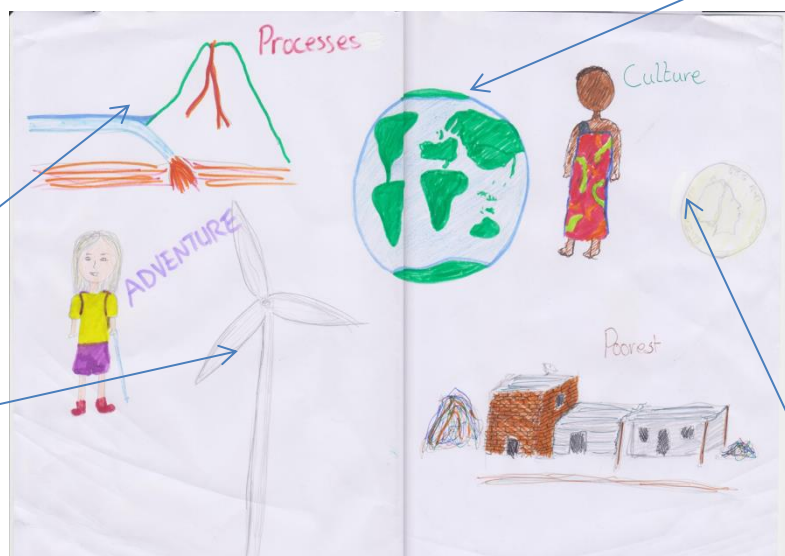
Images drawn link closely to the A2 specification which Hannah is currently studying e.g. tectonic process and development and globalisation. Words are written by some images to convey meaning.

**Iconic** – The globe as an iconic sign signifying ‘geography’ (‘writing the earth’).

Placed centrally on the poster and drawn first suggesting the importance of this sign.

**Iconic** – wind turbine to represent sustainability. Adventurer to represent travel – interest in distant places?

**Indexical** – Images positioned away from ‘poor’ and ‘culture’ – assumption that these are ‘rich world’ phenomena? Traveller appears white and female – aspect which Hannah identifies strongly?



Focus on human geography with little reference to fieldwork, geographical skills, or physical geography. Synoptic linkages are not explicit. Images do not focus on individual or everyday geographies but reflect general topics taught in the context of Hannah's recent formal school experience.

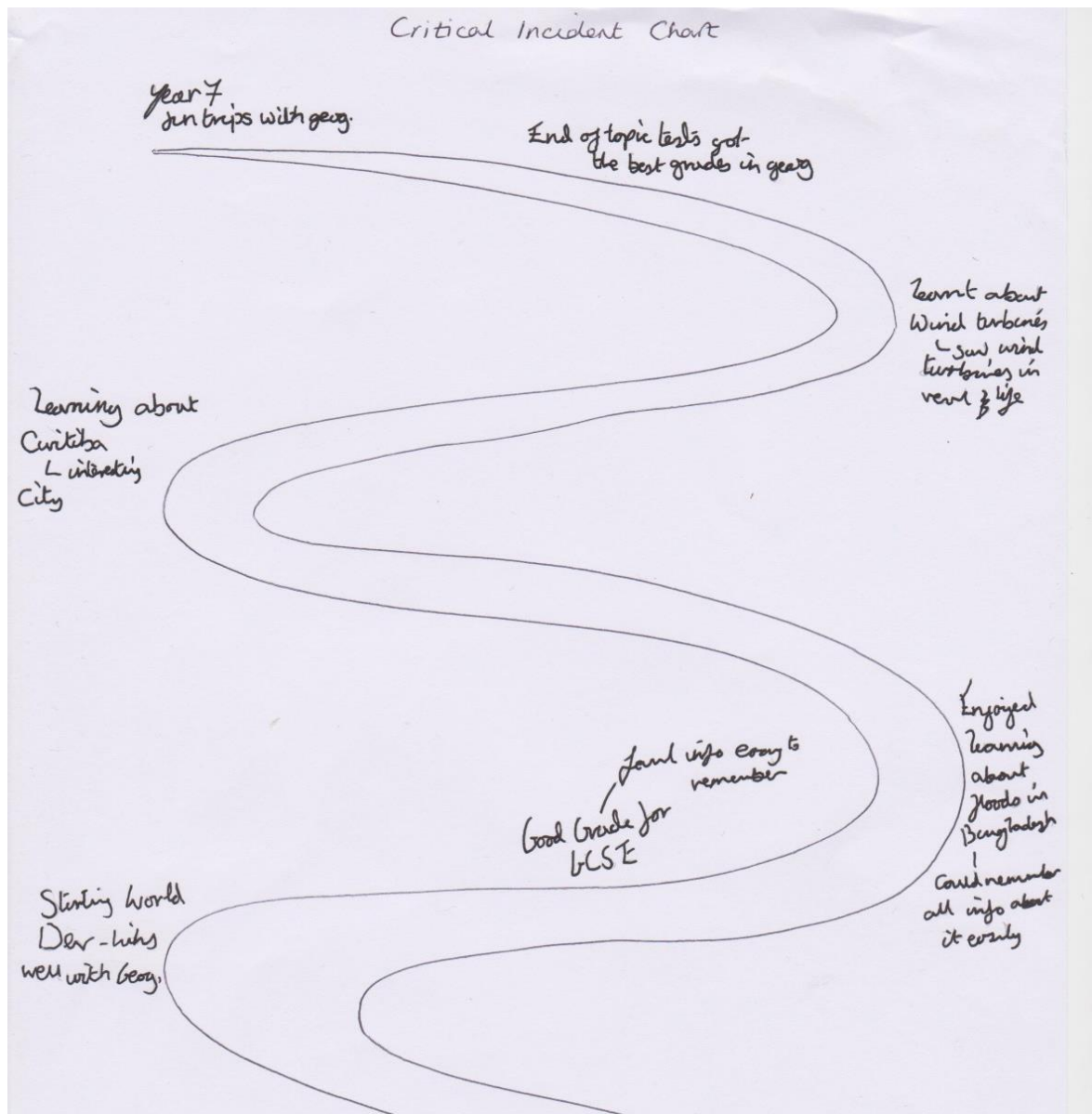
**Iconic** - Images relate to the ‘other’; distant cultures, poor housing typical of less economically developed countries. Represent ‘human geography’

**Indexical** – cultures as ethnically different and exotic. Association between different cultures and slum housing. Is position relative to globe important?

**Symbolic** – Coin seems out of place; drawn last as an afterthought to contrast with culture and slum housing? Differences between culture (‘other’) and adventure (white). Images grouped to show sameness and difference?



Appendix 8.ii The pilot study: Hannah's critical incident chart



*Appendix 8.iii The pilot study: a) extract from Hannah's interview b) analysis of Hannah's interview*

**Interview 2: Contemporary experience**

I: What were the critical incidents that you marked on your chart?

H: Er...well, I started with the first thing that I can remember which was...I think it was in Year 7. We went on some really fun trips as part of geography...it was really good...it made me enjoy it more.

I: Can you remember where you went and what you did?

H: Um...I think we went to the Living Rainforest...I'm fairly sure that was in Year 7...although...no, it was definitely...we were studying ecosystems and rainforests. I can't really remember what we did but I do remember the animals...and the fact it was really hot!

I: Can you remember doing any geography before Year 7?

H: Well...er...we didn't really do geography exactly. I remember doing topic work...but that wasn't...well, it was a bit of everything. I think we did a project on rivers. It was OK...I think we did it for about a term in Year 5...I can't really remember very much about it though.

I: Did you think of it as 'geography'?

H: Yes...well, I think of it as geography now...I'm not sure I did then...but then...er...I'm not sure I thought about that sort of thing then. I mean...I just did the project because that's what we were doing in class. I quite liked doing projects...I found it quite interesting.

I: What about the other critical incidents on your chart?

H: Well...I realised fairly early...probably in Year 7...that I was good at geography. I got the best grades in the class in end of topic tests...it was my best subject, along with languages...French. I think that because I was good at it...er...because I was good...I enjoyed it...and because I enjoyed it, I tried hard...that made me better! I also had a really good teacher in Year 7 and 8. He made it fun....I think the stuff we did was...er...quite interesting too. I like human geography best...well...I like the interaction between physical and human geography...so things like...I'm really interested in sustainability. I think that one of the things we did in Year 9...we studied wind turbines...I went on holiday with my family and saw them in real life...that was quite cool!

**Temporal** – participant highlights specific times which are important

(Pv)

(Ph)

(Ph)

(Pt)

(Phy)

(En)

## Interview 2: Contemporary experience

I: What were the critical incidents that you marked on your chart?

H: Er...well, I started with the first thing that I can remember which was...I think it was in **Year 7**. We went on some **really fun trips** as part of geography...it was really good...it made me enjoy it more.

I: Can you remember where you went and what you did?

H: Um...I think we went to the Living Rainforest...I'm fairly sure that was in **Year 7**...although...no, it was definitely...we were studying **ecosystems and rainforests**. I can't really remember what we did but I do remember the animals...and the fact it was really hot!

I: Can you remember doing any geography before Year 7?

H: Well...er...we didn't really do geography exactly. I remember doing topic work...but that wasn't...well, it was a bit of everything. I think we did a project on **rivers**. It was OK...I think we did it for about a term in **Year 5**...I can't really remember very much about it though.

I: Did you think of it as 'geography'?

H: Yes...well, I think of it as geography now...I'm not sure I did then...but then...er...I'm not sure I thought about that sort of thing then. I mean...I just did the project because that's what we were doing in class. I quite liked doing projects...I found it quite interesting.

I: What about the other critical incidents on your chart?

H: Well...I realised fairly early...probably in **Year 7**...that I was good at geography. I got the **best grades** in the class in end of topic tests...it was my best subject, along with languages...French. I think that because I was good at it...er...because I was good...I enjoyed it...and because I enjoyed it, I tried hard...that made me better! I also had a **really good teacher** in **Year 7 and 8**. He made it fun...I think the stuff we did was...er...quite interesting too. I like human geography best...well...I like the interaction between physical and human geography...so things like...I'm really interested in **sustainability**. I think that one of the things we did in **Year 9**...we studied **wind turbines**...I went on **holiday** with my family and saw them in real life...that was quite cool!

**Topics** – participant highlights topics which are important to their perception of geographical knowledge. These are further classified into Physical (Ph), Human (Hu), Environmental (En), Skills (Sk).

**Influential events** – participants highlight particular events that have had a positive (P) or negative (N) influence. These are further coded as Visits (v), Exams (ex), Holiday (hy)

**Influential characters** – participants highlight particular characters who have had a positive (P) or negative (N) influence. These are further coded as Teachers (t), Friends (fr), Family (fy),

While the methods remained largely the same between the pilot and the second phase of data collection the analysis was streamlined so that this was similar across the three techniques, simplified and from different perspectives (see Chapter 8). In addition, a second optional framework was suggested for the critical incident chart (see Table 8.1) and the interview was conducted in one extended session rather than three separate ones.

*Appendix 8.iv The training room: the location for data collection in the second phase*



*Appendix 8.v Invitation and instructions for the creation of the collages*

Dear \_\_\_\_\_,

This is just a quick reminder that I have you booked in to do your first research session – the completion of a collage - with me on Wednesday 20<sup>th</sup> May during period 3. I will meet you outside the Training Room as close to the end of break as possible.

The instructions that I will give you for the collage are as follows:

***“I want you to create a collage on A3 paper. The collage should be based around what you believe geographical knowledge to be. It should be made up mainly of images, which can be drawn or printed. You can have as long as you need to complete it. I will video the process and you are encouraged to talk about what you are doing throughout.”***

I will obviously provide paper, pens and glue but if you wanted to bring in copies of photographs from home or printed pictures to include in your collage you would be most welcome.

Thanks

Mrs. Kitchen

*Appendix 8.vi Invitation and instructions for the critical incident chart*

Dear \_\_\_\_\_,

This is just a quick reminder that I have booked you in for your second research session on Wednesday 20<sup>th</sup> May during lunchtime. I'll meet you in the Training Room after period 4.

During the session I will ask you to create a critical incident chart, which will be videoed, and I will give you the following instructions:

**Visualise your experiences which have influenced your perspective of geography as a winding river in which each bend in the river's path marks a critical moment. What are the first most significant memories, persons, events or pivotal moments that you recall about your geographical journey? Locate each important episode on a different bend along the length of a winding river where each bend represents a critical moment or turning point.**

If you have any questions, please don't hesitate to ask me.

Mrs. Kitchen

*Appendix 8.vii Invitation and instructions for the interview*

Dear \_\_\_\_\_,

This is just a quick reminder that I have booked you in for your third research session on Thursday 21<sup>st</sup> May during lunchtime. I'll meet you in the Training Room after period 4.

During the session I will be interviewing you about the collage and critical incident which you have completed. I will also ask you questions about how you view geographical knowledge as well as how you chose your subjects for GCSE and A level. I will be videoing the session so that I can type up a transcript which I will ask you to validate.

If you have any questions, please don't hesitate to ask me.

Mrs. Kitchen

### **General Instructions**

Transcribe all interviews using the following formatting:

1. Arial 11 font
2. One inch top, bottom, right, and left margins
3. All text shall begin at the left-hand margin (no indents)
4. Entire document shall be justified

### **Labelling Transcripts**

Individual interview transcript shall include the following labelling information at the top of the document:

Student:

Interview Location:

Date:

Video file number:

### **Documenting Comments**

Comments or questions by the Interviewer should be labelled with by typing **I:** at the left margin and then indenting the question or comment.

Any comments or responses from participants should be labelled with **S:** at the left margin with the response indented. These letters will be substituted for the initial of the student's pseudonym once the transcript has been validated.

*Example:*

- I:** OK, before we begin the interview itself, I'd like to confirm that you have read and signed the informed consent form, that you understand that your participation in this study is entirely voluntary, that you may refuse to answer any questions, and that you may withdraw from the study at any time.
- P:** Yes, I had read it and understand this.
- I:** Do you have questions before we proceed?

---

<sup>121</sup> Adapted from [http://courses.washington.edu/thesis/Manual%202/8\\_Data%20Entry/Instructions\\_Transcription.doc](http://courses.washington.edu/thesis/Manual%202/8_Data%20Entry/Instructions_Transcription.doc), retrieved 24/02/2016.



## End of Interview

In addition, the transcriber shall indicate when the interview session has reached completion by typing END OF INTERVIEW in uppercase letters on the last line of the transcript.

Audiotapes shall be transcribed verbatim (i.e., recorded word for word, exactly as said), including any nonverbal or background sounds (e.g., laughter, sighs, coughs, claps, snaps fingers, pen clicking, and car horn).

- Nonverbal sounds shall be typed in square brackets, for example, [laughs].
- If interviewers or interviewees mispronounce words, these words shall be transcribed as the individual said them. The transcript shall not be “cleaned up” by removing foul language, slang, grammatical errors, or misuse of words or concepts.
- If an incorrect or unexpected pronunciation results in difficulties with comprehension of the text, the correct word shall be typed in square brackets. A forward slash shall be placed immediately behind the open square bracket and another in front of the closed square bracket.

### Example:

**P:** I thought that was pretty pacific [/specific/], but they disagreed.

Filler words such as *um*, *yeah*, *ugh* etc. shall be transcribed.

## Inaudible Information

The transcriber shall identify portions of the video that are inaudible or difficult to decipher. If a relatively small segment of the tape (a word or short sentence) is partially unintelligible, the transcriber shall type the phrase “inaudible segment.” This information shall appear in parentheses.

### Example:

The process of identifying missing words in an audiotaped interview of poor quality is (inaudible segment).

## Overlapping Speech

If individuals are speaking at the same time (i.e., overlapping speech) and it is not possible to distinguish what each person is saying, the transcriber shall place the phrase “cross talk” in square brackets immediately after the last identifiable speaker’s text and pick up with the next audible speaker.

### Example:

**P:** Turn taking may not always occur. People may simultaneously contribute to the conversation; hence, making it difficult to differentiate between one person’s statement [cross talk]. This results in loss of some information.

## **Pauses**

If an individual pauses briefly between statements or trails off at the end of a statement, the transcriber shall use three ellipses. A brief pause is defined as a two- to five second break in speech.

*Example:*

**P:** Sometimes, a participant briefly loses...a train of thought or...pauses after making a poignant remark. Other times, they end their statements with a clause such as but then...

If a substantial speech delay occurs at either beginning or the continuing a statement occurs (more than two or three seconds), the transcriber shall use "long pause" in parentheses.

*Example:*

**P:** Sometimes the individual may require additional time to construct a response. (Long pause) other times, he or she is waiting for additional instructions or probes.

## **Sensitive Information**

If an individual provides others' names, locations, organizations, and so on, the transcriber shall replace this with a line.

*Example:*

**P:** Mr \_\_\_\_\_ was always telling me off.

Once the transcript is completed it will be saved as a word document and validated by the student.

## Appendix 8.ix Coded extract from Olivia's interview

Category: Perspective Categorisation      Category: Intersectionality  
 Category: Perspective Influence  
 Category: Subject Choice

140 O: In Year 12 I did French, History, Politics, English and then World Development at A2 so now I've finished the A2 World Development and I've dropped French. So I've done those three and then I've done an EPQ as well and that was to do with law as well. I: ABI-inf

I: And where are you hoping to go next year? SC: USE-car

O: I've got an offer from Oxford so hopefully grades permitting, to do just law. I haven't firmed it on UCAS yet though! It's a bit scary and I keep changing my mind. I've got a week left, but yeah, hopefully. I think my A level choices have been shaped more by my own research. SC: USE-uni

I: So were your A level choices quite straightforward? I: ABI-inf

O: Yeah, I think they were. I'm really interested in Politics just from the news and things like that. That was the one that I definitely wanted to do even though it was a new subject. History, really important and I've grown to love it and be good at it. French, I really enjoyed and it one of those ones that makes you stand out, but it got progressively harder so I stopped that [laughs]! And then English was just another one that I was doing OK at and worked quite well in terms of what they told you to do. If you got it in mind, particularly if it's something that's quite traditional like law, there's so many guidelines, this is what you should do and luckily it did just fit in with what I'm relatively good at. And I might as well carry on my World Development and I definitely really enjoy my World Development so that was nice to just carry on at the side, it gave me a bit of an escape as well. PI: MED-new

150 I: It's quite interesting because you say you've grown to love history. At what sort of stage do you think you grew to love it and why do you think you grew to love it? SC: RIS-new

O: At Key Stage 3 I remember doing so many stupid little projects on like the Tudors or things I couldn't even tell you other than that. Little, really isolated projects, they do a lot of medieval history at Key Stage 3 which, like the volcano thing is so distant, I wasn't really that interested. But at GCSE we do Britain and Ireland and that was so much more relevant and it becomes more modern history which again becomes a bit more political which is what I'm interested in, which just really appealed to my interests. So at GCSE really enjoyed it, subsequently I did quite well and that's what made me pick A level and then again we're doing America and Vietnam which really appeals to my interests. I'm really interested in conflict and the effects of that. SC: ENT-con

I: So it's the content you engaged more with? SC: ABI-gra

O: Yeah, again we've got brilliant teachers for history and I think that makes a big difference. I've got friends at other schools who hate history because they've got poor teachers. I truly believe that teachers have a big influence, but it was the content more than anything. Maybe this year, we're doing Britain and I really enjoy it and it's a lot better than last year. Like at the time I loved last year but America and Vietnam is more distant still so this year I'm loving it at lot more. It's just how it applies to me to be honest, it's relevant to me and it's within my sphere of interest and I think that's maybe more so than geography. Like I said, if I could just do the human aspect, which is why I probably picked World

170 SC: TAA-enj

SC: ENT-con

## Appendix 8.x Examples from the interviews for each of the codes

CATEGORY: PERSPECTIVE CATEGORISATION	EXAMPLE OF EACH CODE
PC: PLACEIST	
Local	'I went on a bike ride at the weekend and it was one of my DofE routes and I was thinking this is really pretty and actually there's a lot more in the local area than you think.' – Olivia (226 – 227)
National	'Even though we have quite a big rural population in the world, we have loads of really rural places, the UK is very urban centric.' – Qabilah (402 – 403)
Global	'I remember one time, I think it was in Year 6, we had a homework to research a country that we had never heard of before.' – Tabitha (20 – 21)
PC: GENERALIST	
General knowledge	'It'll be useful in a general knowledge quiz but other than that I don't see how it will affect me in the future.' – Sabah (488 – 489)
PC: INTERACTIONIST	
Links	'To get the high levels it always says you must include links to this and that, so I'd always try and get that.' – Tabitha (50 – 51)
PC: THEMATICIST	
Physical	'I don't really think I'm going to learn more about coastal erosion or glaciers or stuff like that.' – Marie (494 – 495)
Human	'We looked a bit at cities and like establishing what cities were and like what were the cities in the UK, stuff like that.' Qabilah (30 – 31)
Topics	Whereas, geography I feel like if you go by topic you can understand a lot of it and then move on to a different topic. – Marie (485 – 486)
PC: SYNTHESISER	
Science	'And then you have the sciency people who like physical geography 'cos they like weather and climate because that's physics and they like the ozone layer because that's chemistry.' – Marie (81 – 83)
World Development	'I mean I did do my World Development to keep my geography aspect' – Olivia (89 – 90)
Other	'the fact that culture kind of has a big impact on the geography of an area, 'cos that would seem more to me like that's got to do with languages' – Philippa (277 – 279)
PC: FIELDWORK	'Like the actual fieldwork itself is good but it's like the other stuff that goes with that, so sort of having to write out and discuss the actual methods and techniques. That's more tedious I suppose.' – Tabitha (55 – 57)
PC: SKILLS	
Maps	You get people who say "Oh, I can't do that, I can't read maps. I don't have a very good memory for pictures, it doesn't appeal to me". – Marie (342 – 343)

DofE	'But I did like going on DofE and using a map.' – Rosie (535)
<b>CATEGORY: PERSPECTIVE INFLUENCE</b>	
PI: PRIMARY TEACHER	
Teacher	'I was never in any of her English classes because we were streamed, but she didn't do much geography with us, didn't do much science with us either. – Rosie (78 – 80)
Activity	'I remember in Year 5, Year 6 we had, you know, like the smartboards and stuff like that coming into our primary school so we could actually make it really interactive.' – Qabilah (52 – 53)
PI: SECONDARY TEACHER –	
Teacher	'I think it was Year 10 and like half of Year 11 my Maths teacher wasn't the best. I think that really put me off.' – Tabitha (164 – 165) KS4
Activity	'And I like the way that it was taught and we could do projects. Again, it was interactive but it was also quite different, we tried different things and we did a variety of kind of activities to get the learning done, which I liked.' – Qabilah (108 – 110) KS4
KS3 / KS4 / KS5	'Yes, Year 7 it's who makes the lesson fun, who doesn't set masses of homework and isn't terrifying. Year 9 it begins to progress on to do you develop a rapport with the teacher and then A level, it's quite annoying when they don't teach you as if you have some level of competence.' – Naomi (89 – 91)
PI: PARENTS	
Career	'My Dad would say 'what about law', and I must have started researching it and thought I was quite interested in it.' – Olivia (120 – 121) Father
Information	'We'd often sit at home and mum would go through the book with us, or sometimes we'd read it ourselves.' – Philippa (46 – 47) Mother
Opinion	'He's discouraged me quite a lot! I went on work experience with him for two days and basically ever person I met said 'don't be a doctor, it's too much hard work'. A lot of them say that, regardless of where you are.' – Sabah (134 – 136) Father
PI: SIBLINGS	'I looked into some things because my sister like when she was applying for university she had all the prospectuses and things so I just flicked through them.' – Tabitha (147 – 148)
PI: FRIENDS	'I split it into human and physical because that's what my friends say they do in Geography so I thought that would be a good place to start.' – Sabah (149 – 150)
PI: TRAVEL	
Holiday	'We used to be on holiday, so then we'd go walking up a river looking for the source or something and then we'd go, this is a meander and look at that and you'd like wade into the river at this point and then go further down the river and wade in and see how much it had got deeper and how much wider it was.' – Philippa (362 – 365)



School trips	'Oh this is a drag and it was the fact that it was a school trip but it's not like a holiday. It's like, you will fill in this booklet, you will do this, you will count the number of waves that go on this bit.' – Marie (431 – 433)
PI: MEDIA	
Television	'I think there are the two contrasts, I was saying with this, the school side and then there's the side that I've got from family and from documentaries and things.' – Tabitha (302 – 303)
Videos	'It's online courses where they have videos and then you do quizzes and then you complete it and you can get a certificate at the end.' – Sabah (173 – 174)
Newspapers	'We don't read newspapers because we were never allowed to when we were younger and then...we got National Geographic for a year so we used to read that.' – Philippa (456 – 457)
Radio	'Yeah, I mean I quite like it when somethings on the radio or whatever and it links directly to something I've been learning in geography.' – Tabitha (322 – 323)
PI: SOCIETY	
Subject hierarchy	'In China it's like maths first. It's not even science, it's maths first.' – Rosie (421 – 422)
Grammar	'Cos I find it fascinating and that's what really annoys me, because my view of the world is shaped by going to an all girls grammar school. That annoys me massively.' – Naomi (135 – 136)
<b>CATEGORY: SUBJECT CHOICE</b>	
SC: ENJOYMENT	
Content	'I truly believe that teachers have a big influence, but it was the content more than anything' – Olivia (169 – 170)
Activity	'I think I liked the sort of researching and sort of getting my teeth into it a bit more.' – Tabitha (25 – 26)
SC: ABILITY	
Grades	'And then I was getting about the same scores in RS and Geography, I was getting level 8s in both so I thought I should pick one between them.' – Sabah (92 – 93).
Skills	'You had to learn how to use a lot of things and there were new skills you had to acquire.' – Philippa (379 – 381)
SC: USEFULNESS	
Career	'History was better for law in terms of analysis and investigation and stuff.' – Olivia (88 – 89)
University	'We went and looked around and I was like, well I'm not going to do music at university because I looked at the course and I thought, this is not what I enjoy at all.' – Rosie (269 – 270)
SC: FAMILY	
Advice	'He has, he's discouraged me quite a lot! I went on work experience with him for two days and basically ever person I met said 'don't be a doctor, it's too much hard work'.' – Sabah (134 – 135)
Career	'_____ (older sister) is going to do audiology, but my parents weren't. Dad did Maths and Mum did Art.' – Philippa (173 – 174)

<p>SC: TEACHERS</p> <p>Advice</p>    <p>Enjoyment</p>   <p>SC: EFFORT</p>  <p>SC: RISK</p> <p>new subjects</p> <p>SC: CHALLENGE</p>	<p>‘And my teachers were like, ‘Oh yeah, you can do this subject’, I was like, ‘that’s not really helping, I need someone to tell me I can’t do their subject!’ – Qabilah (191 – 192)</p> <p>‘I didn’t really get on with my Spanish teacher. At all. I mean it didn’t really help that she was head of the Key Stage or whatever and I was a nightmare’. – Marie (251 – 252)</p> <p>‘From what I’ve heard the music students weren’t particularly prepared for the exam and the effort I put in would have been disproportional to the progress I would make.’ – Rosie (283 – 285)</p> <p>‘And then I thought Business Studies, I don’t know how that one’s going to be so let’s not do that, I don’t want to take a risk.’ – Sabah (91 – 92)</p> <p>‘I kind of want to do it just because it’s a bit of a challenge but at the same time I really shouldn’t jeopardise my other subjects.’ – Rosie (341 – 342)</p>
<p><b>CATEGORY: INTERSECTIONALITY</b></p>	
<p>I: GENDER</p> <p>Informs</p>  <p>Intersects</p> <p>I: CLASS</p> <p>Informs</p>  <p>Intersects</p> <p>I: ETHNICITY</p> <p>Informs</p>  <p>Intersects</p> <p>I: ABILITY</p> <p>Informs</p>  <p>Intersects</p>	<p>‘It’s interesting to see the difference between the girls’ perception and the boys. I think that maybe, I don’t want to be stereotypical but...’ – Olivia (306 – 308)</p> <p>‘I think especially at this school there’s a tendency for girls to be really critical of what they do.’ – Rosie (168 – 169)</p> <p>‘Yeah, I think it’s seen as, classical music is seen as you have to be rich to be able to do it well.’ – Rosie (436)</p> <p>‘Well my uncle works for Shell and earns a lot of money so I’d quite like to do that! And he did the same sort of degree, well Petroleum Engineering but yeah.’ – Marie (189 – 190)</p> <p>‘I come from Bangladesh, so that’s kind of different geography, different climate, different people, different language, different culture, that’s something that I already carry with me in my identity I guess.’ – Qabilah (424 – 426)</p> <p>‘It’s not just buying the piano that’s expensive, it’s getting somewhere to house it.’ – Rosie (438 – 439)</p> <p>‘Got my GCSE results and you’re supposed to have at least 5 A*s and all that jazz and then I got really ill in Year 12 and it was accepted that medicine wasn’t going to be straightforward.’ – Naomi (203 – 205)</p> <p>‘Yeah, ‘cos GCSE was a breeze for me, I didn’t do any work for it. I know that makes me sound really cocky but it’s sort of like GCSE Chinese is like Year 2 or Year 3 Chinese and I had gotten up to that far in Mandarin so it wasn’t hard.’ – Rosie (344 – 346)</p>

## Students as Researchers (SaRs)

Every Tuesday lunchtime, a group of Year 9 students meets with Mrs Kitchen and, with the support of the Open University Children Research Centre, are taught how to effectively research. Working in groups, we chose a field of interest and have shaped a question around this. Examples include: 'Why are women not as actively involved in science as men?', 'How does reading benefit you?' and 'Does technology have more positives than negatives?'. Some groups chose to send out questionnaires, whilst others decided to interview people from their target audience. We are now analysing our data to answer our questions. I have learnt a lot from this project and will use skills from it in the future.





Appendix 9.ii. An example of a research project from the students as researchers training<sup>122</sup>



Does technology possess  
more positives than  
negatives?

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<sup>122</sup> Other than removing her name to protect her anonymity the research is presented here in its original format.

This report will give you an insight into the method that I underwent whilst trying to answer my question “does technology possess more positives than negatives?”

### **What Was My Question?**

We all come across technology in our lifetimes but we may not realise the impact that this has on us as humans and technology have more positives than negatives? I chose this question because it is current to my age group so I can relate to it, and I have since developed an interest in this field.

### **Prediction:**

Due to the fact that technology is so readily available to today's society, I felt that the majority of people would feel that technology possesses more positive connotations but this is still dependant on the responsibility of the user or the purpose one is using the technology for.

### **My Personal Aims:**

The aims that I formed before I began the research and analysis process were to make people think in more detail when they were answering my questionnaire about their technology usage and whether this actually had a more positive or negative impact on them. There are many underlying factors that contribute to peoples' opinions on this topic and it is easy to be unintentionally misled when considering the positives and negatives related to this topic due to pressures and marketing in the media and between peers.

### **Choice Of Method:**

I decided to send out an anonymous questionnaire enabling students to independently answer my questions which would consequently eradicate an element of pressure or a shape in their views if they were asked to write their name. It also makes everyone feel more equal and not feel that their views may be seen differently to other participants. The reason why I chose a questionnaire was because the advantages are being permitted to ask opened and closed questions depending on the nature of my research and the answers that I was requiring in order for me to answer my question. The only downside being that the response rate can be fairly low (people may feel bombarded with questions, have no free time to complete them or may not be bothered at all). However, aside from this, I did well to overcome this and was actually surprised to find that I received quite a few responses and therefore detailed results and conclusions to draw from.

Some of the questions I included were:

- 1) What is the main form of technology that you use? (circle your answer)  
a) Computer b) Mobile phone c) TV d) Games console e) other

This question is fairly closed as it only requires one answer unlike an open question that requires more detail in the response. I used these questions to generate a basic idea of the main forms of technology used most frequently and could therefore gain a feel for the types of technology people found most beneficial.

- 2) Overall, do you think technology is more positive than negative and why? (please give reasoning and you can keep your answer brief)

This question gives a wider range of options for your potential answer so is an open question unlike the previous one. It gives the target the option to either reply simply but the need for a longer, more detailed answer is implied by the nature of the question, particularly by the word "overall." This word factors in all the aspects related to the topic; in this case, technology. It asks one to sum up their opinion.

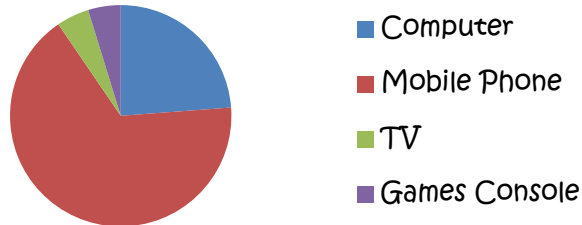
My findings revealed that overall, the majority of people found that technology provoked a more positive than negative change on society however; this factor was dependant on the intended purpose and person using the technology.

Below are some graphs that depict my findings:

This pie chart shows the form of technology that students use in their everyday lives.

The graph concludes that over  $\frac{3}{4}$  of the students use their mobile phones the most which I predicted would be the most common result due to the fact that everything is so readily available on a mobile phone now; we do not have to solely rely on books or computers. Students can use phones for internet, social networking, gaming and messaging.

## Main Form Of Technology Used...

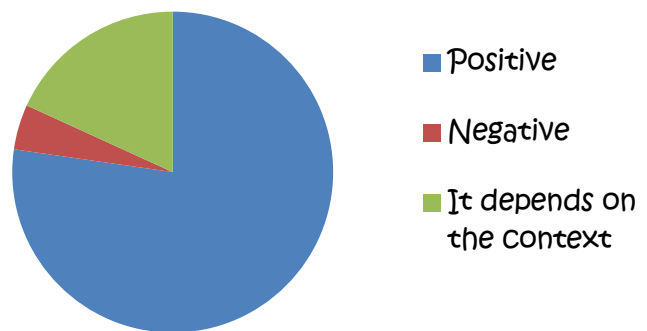


The pie chart shown to the left shows the findings from my "main form of technology used" question.

The graph concludes that over  $\frac{3}{4}$  of students felt that technology was overall more positive than negative but almost  $\frac{3}{4}$  of students felt that technology can only be branded positive or negative when the purpose used is defined.

The pie chart to the right shows the answers and statistics collected from the last question on my questionnaire which poses the overall question "does technology possess more positives than negatives". Overall, the majority of people that answered my questionnaire stated that they thought that technology was more positives than negative; this discounted the context it was used in however. If I were to ask the question again, to improve my data, I could perhaps state the situations that one would use this technology to gain an even more solid understanding as to whether people feel that it is more positive than negative. It was implied that one can only determine whether technology is truly positive or negative when the use is defined; by those who said that "it depends on the context".

## Overall, is technology positive or negative?



## Any Unusual or Unexpected Results?

When I was carrying out my research, I did not encounter any unusual results, perhaps suggesting that my research was carried out well and my predictions lined up correctly with my results. Due to the society that we reside in, I thought that perhaps all the people questioned would feel that technology was purely positive and only a very small fraction of people or nobody at all would feel that we can only decide whether it is positive or negative when the purpose it is used for is defined.

## What Could I Do To Improve?

To broaden my research and ensure that the data collected is more reliable, I could have given my questionnaire to a wider range of age groups to see if this factor influenced any opinions or swayed anyone's views; I only gave it to students and not adults who may use technology for different purposes. I could also establish whether different sectors of society possess different views on this topic. This would enable me to clearly ascertain whether or not people feel that technology has provoked a positive change on society.

*Appendix 9.iii. The letter sent to students as researchers inviting them to be part of this doctoral research*

Dear \_\_\_\_\_,

I would like to formally invite you to be part of my doctoral research project which I am completing at the University of Cambridge. Last year you were part of the Students as Researchers (SaRs) club and were trained to carry out research in a systematic and ethical way. I would like to work with you to hone your research skills in a new project which will form part of the evidence for my doctoral thesis. We will be investigating ethnic minority representations of geographical knowledge and how this links with option choices at GCSE and A level.

As we will be working as a smaller group I am happy to run sessions at times that are mutually convenient, either at lunchtimes or after school. I anticipate that we will probably need 4 or 5 of these: 1 or 2 to introduce the research and to plan what you are going to do; 1 to check that the data collection is going smoothly and 2 to analyse the data.

I would like to hold the first of these meetings this Wednesday 10<sup>th</sup> September in the Training Room (at the top of the stairs by the Main Hall) at 1.40pm. I will provide refreshments. Please could you let me know whether you would like to be part of the project and also whether or not you can make the meeting on Wednesday?

Best wishes



Mrs. Kitchen

[rik52@cam.ac.uk](mailto:rik52@cam.ac.uk)

## Appendix 9.iv. The minutes for the first students as researchers meeting

### Students as Researchers (SaRs) Meeting 1 – Wednesday 10<sup>th</sup> September 2014

Mrs. Kitchen introduced this phase of the Students as Researchers project. Mrs. Kitchen has noticed that the uptake of Geography at both GCSE and A level by ethnic minority students is uneven. This is both at a national level and also within the school. The graphs below illustrate that, at GCSE level, some ethnicities are under-represented while others are over-represented. At A level, students of some ethnicities do not opt to take the subject.

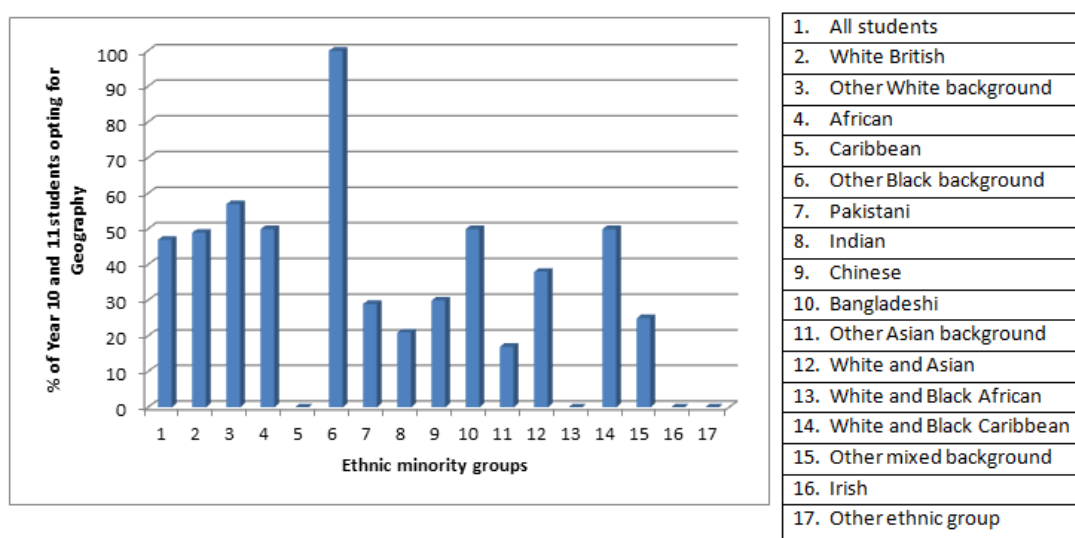


Figure 1.3: The % of the 2012 - 2013 school student cohort taking GCSE Geography by ethnic group.

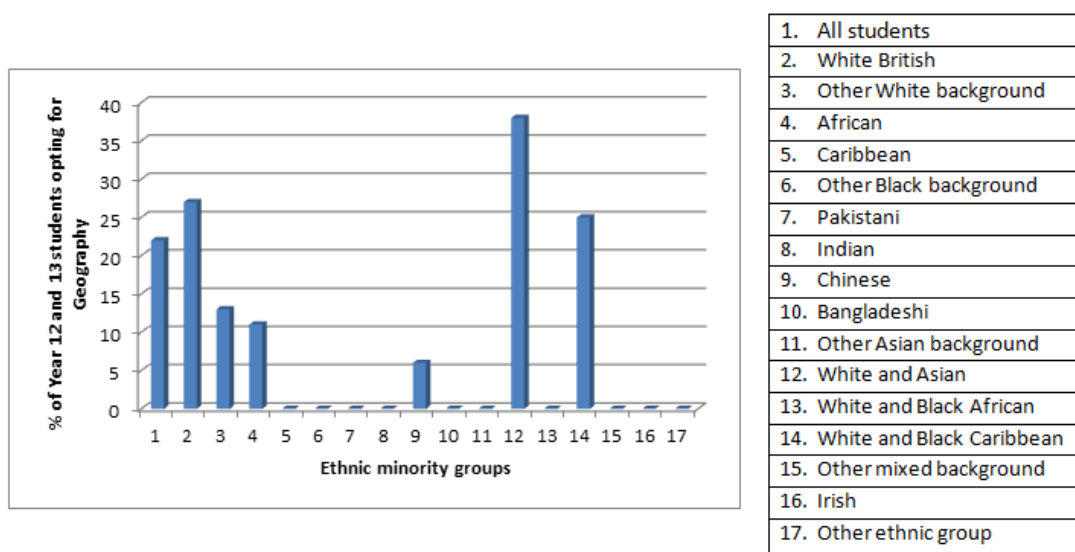


Figure 1.4<sup>16</sup>: The % of the 2012 - 2013 school student cohort taking A level Geography by ethnic group.

- Mrs. Kitchen is interested to explore what is going on here. She is doing a doctorate with the University of Cambridge, Faculty of Education; the title of her research being 'What does geographical knowledge consist of from ethnic minority perspectives? Exploring the stories that relate to perceptions and link with option choices.'
- To research this, Mrs. Kitchen would like to do two strands of research. She is going to questionnaire all 400 sixth formers in Years 12 and 13 and, from this, select ten students to take part in her main research. These students are going to create a collage to illustrate what they see as geography, chart critical incidents which have affected their view of geography and take part in an interview which will explore some of these issues in more depth.
- Mrs. Kitchen would also like the Students as Researchers to research this project but from a different (student) perspective. This meeting started the process of planning what this strand might involve.
- The ethics of the research were highlighted, particularly as ethnicity can be a sensitive subject. We will return to this when we plan exactly what we are going to do and who were are going to interview but there are two important things to remember:
  - a) You cannot label people according to their ethnicity. You can encourage them to describe their identity (which may or may not include ethnicity) but you cannot do the labelling.
  - b) Ethnicity data is sensitive so you must make sure all the data you collect is kept locked away – either in your locker or give it to Mrs. Kitchen to look after. You cannot leave it lying around the classroom.
- We discussed when was a good time to meet and it was suggested that Tuesday lunchtimes were best for everyone. **Please could our next meeting be Tuesday 23<sup>rd</sup> September at 1.40pm in the Interview Room?**
- We then started to discuss what the focus of the Students as Researchers research could be and wrote down our ideas on sugar paper. The three main aspects to consider are **ethnicity, geography** and **options**; as long as your research incorporates this you can take it in any direction you like.
- Jane and Rachel<sup>123</sup> started thinking about comparing the different percentages of people taking geography in different areas e.g. comparing A\_\_\_\_\_ with M\_\_\_\_\_ and D\_\_\_\_\_. They also thought about looking at the ethnicity of who take geography compared to girls. Amy, Tara and Adele started thinking about the role that parents (and others) have in influencing students to take particular options.
- In our next meeting we will try to firm up some key questions as well as think about what we are going to do (questionnaires, interviews etc.) and who we are going to ask. Please let Mrs. Kitchen know if you cannot make the meeting. She will type up notes for everyone so that they know how the project is progressing.

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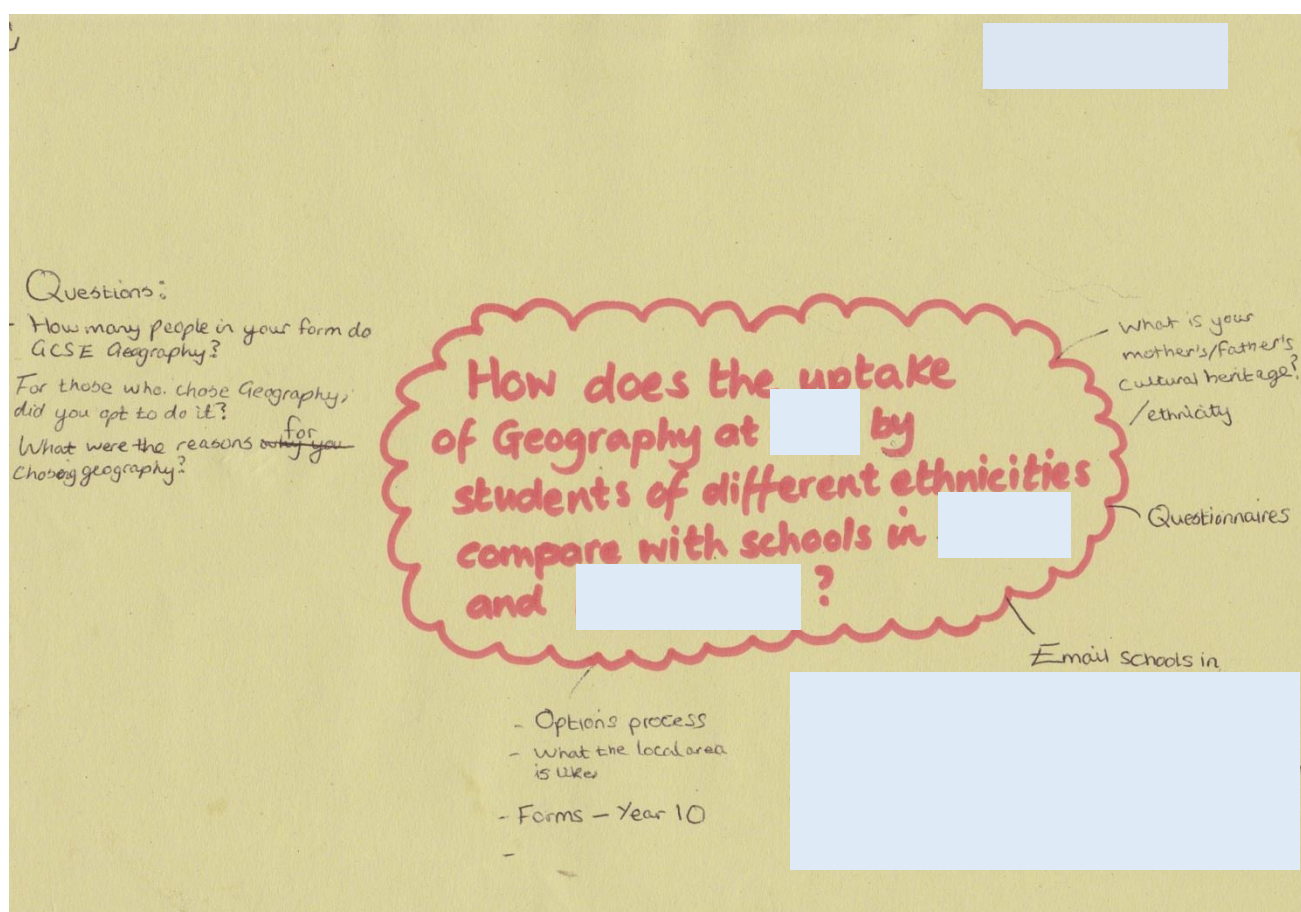
<sup>123</sup> In the same way that pseudonyms have been adopted for the eight case study students in the teacher-researcher strand so I have also given the students involved in the SaRs project names to protect their anonymity.



*Appendix 9.v. The minutes for the second students as researchers meeting*

**Students as Researchers (SaRs)  
Meeting 2 – Tuesday 23<sup>rd</sup> September 2014**

- Mrs. Kitchen asked students to consider the five key questions which had come out of the first planning meeting. These were:
  - a) What influence do parents have on pupils' choice of GCSE options?
  - b) How does the uptake of Geography at AHS by students of different ethnicities compare with schools in MK and Dunstable?
  - c) How does the uptake of Geography by different ethnicities compare to RS, History and Business Studies?
  - d) What factors influence students' choices in the uptake of GCSE Geography?
  - e) Is ethnicity an important factor in the choosing of GCSE options?
- Jane and Rachel chose to focus on 'How does the uptake of Geography at Claytons by students of different ethnicities compare with schools in M\_\_\_\_\_ and D\_\_\_\_\_?'



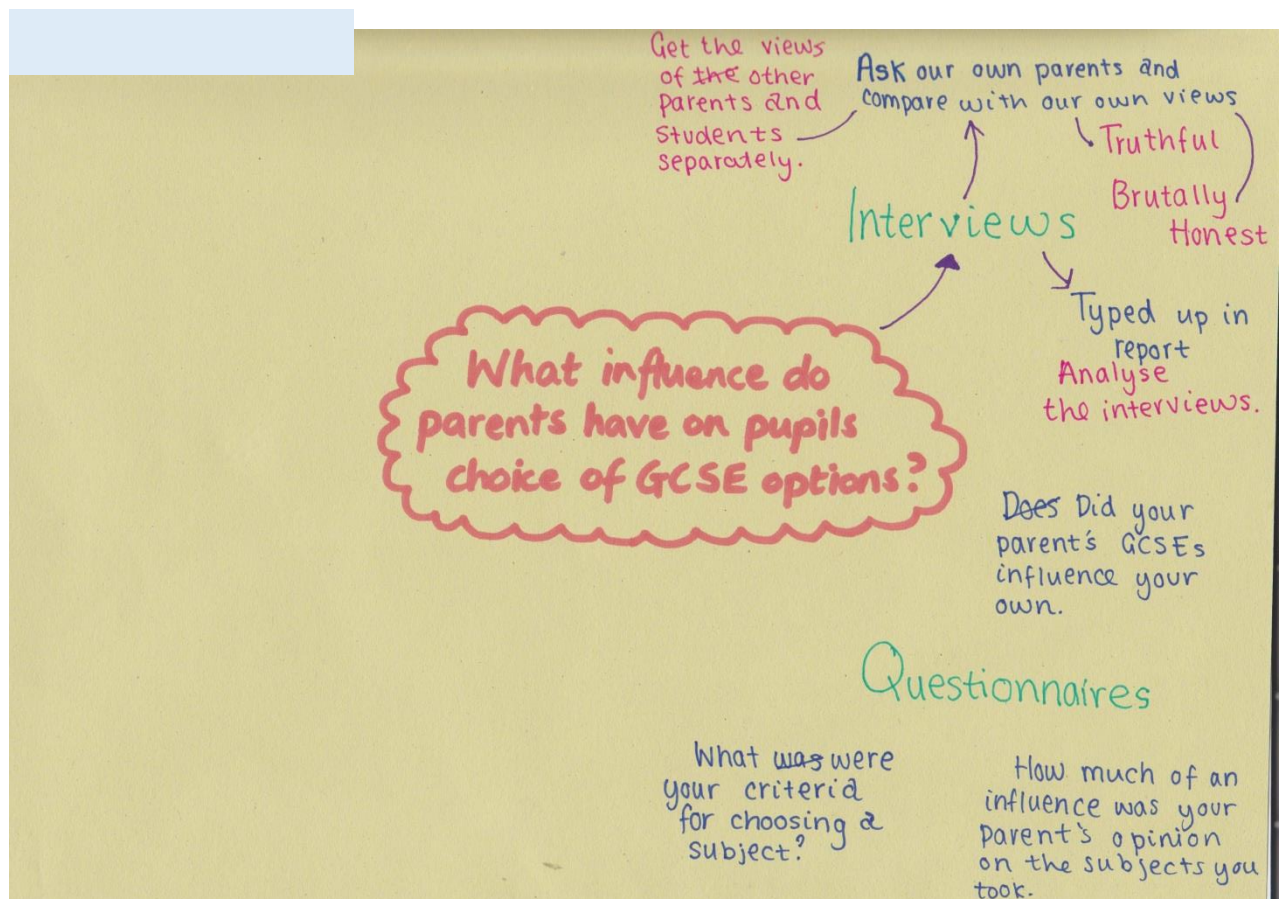
- a) The group identified four schools in D\_\_\_\_\_ and four schools in M\_\_\_\_\_ where they have contacts and could possibly collect data.
- b) They thought that they would look on the schools' websites to find out about the options process and the amount of choice and send questionnaires to Year 10 students.
- c) The questions they identified for the questionnaire were:
  - How many people in your form do GCSE Geography?

- For those who chose Geography, did you opt to do it?
- What were the reasons for choosing Geography?

Things to consider:

- How are you going to discover the ethnicities of people who opt / don't opt for geography while remaining ethical?
- Is it worth highlighting four schools in A\_\_\_\_\_ so that you have 12 very different schools in total?
- You will need to contact the schools to explain the question you are investigating. Could you ask whether the schools would be willing to share figures regarding the numbers of students of different ethnicities who take geography? It may be a good idea to talk to / interview the Head of Geography in each of the schools to find this information.

Amy, Tara and Adele chose to focus on 'What influence do parents have on pupils' choice of GCSE options?'



- This group decided that they would like to do a mixture of questionnaires and interviews. They decided that their questionnaires would ask the following questions:
  - What were your criteria for choosing a subject?
  - How much of an influence was your parent's opinion on the subjects you took/
  - Did your parent's GCSEs influence your own?
- They decided that they would interview pairs of pupils and their parents although they would do this separately.

*Things to consider:*

- *Who are you going to ask your questionnaires to? Are you going to ask any more questions? How are you going to phrase these? What order will the questions be in?*
- *Who are you going to interview? What are the questions you are going to ask? How are you going to record these?*
- *How are you going to identify the ethnicities of the students / parents? Are you going to identify the ethnicities of the students / parents? One way to do this might be to get the interviewees to identify themselves e.g. the first interview question could be 'how would you describe yourself?'*

Mrs Kitchen has got a meeting with her supervisor on Thursday 23<sup>rd</sup> October where she will discuss what we have done so far. **Would it be possible to work on these plans ready for a final planning meeting at lunchtime on Tuesday 21<sup>st</sup> October in the interview room?**

Could you bring to this meeting:

- A completed mind map
- An example of your questionnaire / interview questions
- A plan of who is going to be responsible for what and when the data is going to be collected.

*Appendix 9.vi The questionnaire used for Amy, Tara and Adele's research: 'What influence do parents have on pupils' choice of GCSE options?'*

As part of our students as researchers research project we are investigating the question, 'What influence do parents have on pupils choice of GCSE options?' Please could you complete this questionnaire and return it to T34 or 10C's pigeon hold or Mrs Kitchen's tray as soon as possible.

Thank you

1. What GCSEs did you choose?

2. What GCSEs did your parents choose when they took their GCSEs?

3. How easy did you find choosing your GCSE options?

4. How much of an influence was your parents' opinion on the subjects you took?

5. Did your parents' GCSEs influence your own choice?

Thank you for completing our questionnaire

*Appendix 9.vii The questionnaire used for Jane and Rachel's research: 'What factors influence students' choices in the uptake of GCSE geography?'*

**Questionnaire**

Have you taken GCSE geography?

Please tick as many as required

**Yes:**

You found it easy ☐

You found it fun ☐

It is relevant to what you want to do in the future ☐

Someone told you to do it ☐

You are good at it ☐

You like the teacher ☐

You like the trips ☐

Your friends took it so you did too ☐

Other – Explain



As part of our Students as Researchers project we are investigating the factors that influence students' GCSE choices and we would be very grateful if you would be kind enough to complete our questionnaire.

**No:**

You found it difficult ☐

You found it boring ☐

It is irrelevant to what you want to do in the future ☐

Someone told you not to do it ☐

You are not good at it ☐

You don't like the teacher ☐

You don't like the trips ☐

You wanted to do other things more ☐

Your friends didn't take it so you didn't either ☐

There's too much writing ☐

Other – Explain

Are You Happy With Your Choice?

Yes ☐

No ☐

If Not, why?

Thank you – please return to 10Cs pigeon hole.



## Appendix 12.i EdD conference 2016 presentation – Students as researchers: the ethical dilemmas of climbing up the ladder of participation

### Students as Researchers: the ethical dilemmas of climbing up the ladder of participation

Rebecca Kitchen  
University of Cambridge  
4<sup>th</sup> Year EdD



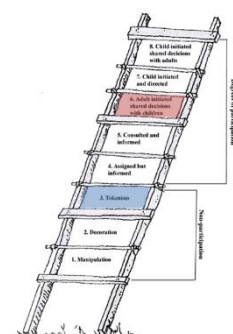
#### Ethical dilemmas:

2. Is it ethical for students to research their peers when ethnicity is to the fore?

1. SaRs research perceptions of geographical knowledge and / or option choices with no reference to ethnicity (see Abebe, 2009).

2. SaRs research perceptions of geographical knowledge and / or option choices with no reference to ethnicity. I subsequently analyse the data with reference to ethnicity using information about participants held on SIMS.

3. SaRs research perceptions of geographical knowledge and / or option choices. Participants describe characteristics of their own identity (which may or may not be ethnically based) at the outset and on their own terms (see Jabeen, 2009).



The ladder of participation adapted from Hart (1997: 41)

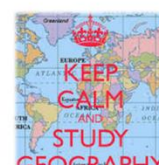
- Masters research was tokenistic
- Want to transform the participation of students to push them up the ladder

Two groups of student researchers:

What influence do parents have on pupil's GCSE options?

How do students account for the option choices that they make?

What are the factors contributing to whether or not students take GCSE Geography?



What does geographical knowledge consist of from ethnic minority perspectives? Exploring the stories that relate to perceptions and link with option choices.

- What do students of different ethnicities conceive as geographical knowledge?
- How do students' stories relate to these conceptions?
- How do students account for the option choices that they make?

#### Ethical dilemmas:

3. If I decide to use the student's research how can I weave their findings and analysis with my own to create a coherent narrative?



#### Ethical dilemmas:

1. Should I hand over control of my doctoral research to the students?



### Appendix 13.i Plan for dissemination of this research

<b>Title</b>	<b>Journal / Publisher/Audience</b>	<b>Focus</b>	<b>Timescale</b>
<i>Challenging assumptions – what do we mean by inclusive geographies?</i>	<i>Geography The Geographical Association</i>	<i>Challenge definitions of inclusivity drawing on this research</i>	<i>Submitted Feb 2017 Publication Summer 2017?</i>
<i>Engaging with intersectionality</i>	<i>LEID research community</i>	<i>The lens of intersectionality and how it is used in this research</i>	<i>April 6th 2017</i>
<i>Exploring ethnic minority representations of geographical knowledge</i>	<i>The Geographical Association annual conference</i>	<i>Paper presenting the methodology and findings from this research</i>	<i>April 21st 2017</i>
<i>Exploring ethnic minority students' representations of geographical knowledge</i>	<i>Geography The Geographical Association</i>	<i>General article discussing the findings from this research</i>	<i>Submitted May 2017 Publication Autumn 2017?</i>
<i>The process of theory development: implications for supervisors and students</i>	<i>EdD conference 2017 University of Cambridge</i>	<i>Developing theory – focus on subject choice theory</i>	<i>June 17th 2017</i>
<i>Seeing geography: representations, choices and stories</i>	<i>The Geographical Association or Springer?</i>	<i>Sole authored book similar to Hopwood (2012)</i>	<i>Discussions with Geographical Association June 2017 Submit 2018?</i>
<i>Who is in my class?: activities and strategies</i>	<i>The Geographical Association or Harper Collins?</i>	<i>Toolkit with activities and strategies to be used with students (see Chapter 13)</i>	<i>Discussions with Geographical Association August 2017</i>
<i>Students as researchers: enabling young people to have a voice in research</i>	<i>Children's Research Centre or International Journal of Educational Research?</i>	<i>Either an article or a handbook for practitioner-researchers</i>	<i>2018</i>
<i>Theorising student representations of geographical knowledge</i>	<i>IRGEE</i>	<i>Article putting forward representation categorisation theory and perspective influence theory for discussion</i>	<i>2018</i>